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C & D

CHEMIST AND DRUGGIST

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THE WEEKLY NEWSPAPER FOR PHARMACY
and all sections of the drug, pharmaceutical,
fine chemical, cosmetics, and allied industries

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C&D

CHEMIST AND DRUGGIST

Volume 187

JANUARY 28, 1967

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Heroin Addicts

INCREASE PROBABLE IN BRITAIN

HEROIN addicts in Britain could increase from just over 500 to almost 11,000 by 1972, according to a forecast by the Vera Institute of Justice, New York, states a report in *The Times*, dated January 24. If the present trend continues the Vera Institute have calculated the following figures for heroin addicts in Britain: 1966, 789; 1967, 1,202; 1968, 1,861; 1969, 2,880; 1970, 4,470; 1971, 6,950; 1972, 10,819. The report adds that the figures are being considered by the Home Office and that some of the officials consider the figures could be an overestimate, but they are not discounting them. A further report states that at least seven out of every ten people who are treated for heroin addiction in Birmingham return to the drug within a few months. Compared with some other centres, Birmingham believes it is doing rather well. Dr. John Owens, head of the drug addiction unit at All Saints Hospital, said "It is difficult to be precise, but at the present time I believe that 90 to 95 per cent. of the addicts being cured in this country go back to drugs."

Cosmetic Proprietaries

DATE FIXED FOR RPM HEARING

THE Restrictive Practices Court has fixed April 29 as the date for hearing the claim that cosmetics and toilet preparations should be exempt from the Resale Prices Act, 1964. Cosmetics and toilet preparations will thus become the third reference to come before the court for a full hearing under the Act. The hearing is expected to last for several weeks. Mr. R. A. Barr, for the Registrar of Restrictive Trading Agreements, told the court on January 20 that there were ninety-nine registered suppliers. Forty-six had originally entered appearances and forty-three had delivered a joint statement of case. That figure had later been increased to forty-four.

Computer Centre

HEALTH MINISTRY'S MOVE

FIRST phase in the move to Fleetwood, Lancs, of part of the work of the Ministry of Health has been completed with the installation of an NCR-Elliott 4120 computer at the Ministry's new computer centre at 200 Broadway, Fleetwood. The computer

will at first be dealing with the health services superannuation scheme and statistics relating to mental health, prescriptions, and dental earnings and treatments. At present the work is carried out under contract by outside computer agencies.

Thefts Warning

CHEMISTS' LOSSES IN LONDON

A WARNING to pharmacists to be on their guard against thefts from counters has been issued by the National Pharmaceutical Union. Within the past two weeks two well dressed young men with Irish accents have entered two pharmacies in the Portobello Road and Brixton areas and have asked to see an item of stock that the assistant had to turn away to obtain. They then snatched razor blade "dispensers" and in one instance cine films. The men are believed to have arrived in an Austin A35 car.

Health Congress

PHARMACEUTICAL SECTION PLANS

A PHARMACEUTICAL section is being included for the first time in the annual Royal Society of Health Congress, which is being held this year at Eastbourne, Sussex, April 24-28. The section, held in the afternoon of April 24, is being devoted to a symposium on "Disinfectants." Contributors are Professor A. M. Cook (School of Pharmacy, University of London) on their evaluation, Dr. Christina M. Cousins (National Institute for Research in Dairying) on agricultural and dairying aspects, and Mr. T. R. Auchincloss (chairman, British Disinfectant Manufacturers' Association) giving the manufacturer's viewpoint. The section is being run in conjunc-

tion with the Pharmaceutical Society of Great Britain. President is Sir Graham S. Wilson (London School of Hygiene and Tropical Medicine) and recording secretary Dr. K. R. Capper (Pharmaceutical Society). Opening address at the Congress is being given by Mr. K. Robinson (Minister of Health) on "Health and the Economic Situation." Forms for enrolment (£8 8s.) or sessional tickets (£1 1s.) may be obtained from the Society at 90 Buckingham Palace Road, London, S.W.1.

Education in Pharmacy

PRaise FOR NEW STANDARDS

THE president and Council of the Pharmaceutical Society have been congratulated by Mr. G. H. Moore (vice-chancellor, University of Bath) on achieving an almost completely graduate pharmaceutical profession. Mr. Moore, himself a pharmacist, was guest with other university vice-chancellors and technical college principals at a dinner given by the Council on January 10. He said that the curriculum for pharmacy students covered a wide area which may at one time have meant a rather superficial approach to some subjects. But studies were now in considerable depth and the pharmacy curriculum was a fine training for a young graduate. As an administrative head of a university he was conscious of the value that the school of pharmacy had for the university as a whole. Pharmacy made use of fundamental principles in a wide variety of disciplines and thus provided a valuable link between a number of schools. "You have not only enhanced the tradition of our own profession but certainly given a dimension to higher education in the



CHAIRMAN STUDIES PHARMACEUTICALS PRODUCTION: Sir Paul Chambers (chairman of Imperial Chemical Industries, Ltd.) dons the white overall of the department for a tour of the Macclesfield works of the company's pharmaceutical division. He is shown with one of the operatives in the packing hall.

universities and major colleges in this country which might well not have arisen in those institutions if they had not had such schools."

Distributive Trades

DECLINE IN CAPITAL SPENDING

THE Economic Development Committee for the Distributive Trades, at its meeting on January 10, considered the report of its working party on the effects of the selective employment tax in distribution. The report dealt with some of the general effects and examined in particular the problem of the effect of the tax on part-time employees and wholesalers. The E.D.C. referred the report back to the working party for clarification of an aspect of its conclusions concerning part-time workers. It is expected that recommendations based on the report will be submitted to the Chancellor of the Exchequer by the E.D.C. in the near future. In its discussions on the effects of the government's economic measures in the distributive trades the E.D.C. noted the substantial decline of 13 per cent. during 1966 in capital investment; that it was particularly marked in plant and machinery; that a further decline had been forecast for 1967 by the Board of Trade; and that the effects of the present restrictions on the granting of building licences for shops and stores appeared to be preventing the development of the larger and more efficient units. It was agreed to make further representation to the Chancellor of the Exchequer about the need for some modification of the policy, which deprives the distributive trades of investment incentives. The committee reaffirmed its continued support for the 10s. unit as the choice for decimal currency. They noted with pleasure that a start is to be made on a proposed inquiry into investment in retailing. That is being undertaken at the request of the E.D.C. by the Department of Applied Economics at the University of Cambridge.

Price-fixing Agreements

WEAKNESSES IN THE PRESENT LAW

THE mass of price-fixing agreements has been dismantled and there is no backlog of important agreements awaiting their turn to be referred to the Restrictive Practices Court, declares Mr. R. L. Stich (registrar of Restrictive Trading Agreements) in his Report on Restrictive Trading Agreements covering the period July 1, 1963, to June 30, 1966 (H.M. Stationery Office, price 5s. 6d.). The registrar states that, of the agreements at present on the register, it was unlikely that more than a handful would be defended by the parties before the courts. The registrar reviews certain weaknesses in the Restrictive Practices Act, 1956, including absence of any effective sanctions against those who fail to submit an agreement for registration. Mr. Stich believes that "this failure to comply with the law is too often due to the wider realisation that no ill befalls parties who do not register and that, once registered, their agreement's chances of survival

are slim." The definition of an agreement that requires to be registered was in his view not wide enough to include clearly all information agreements that could be operated so as to be equivalent to a common price agreement. There was also the agreement—which people had no intention of defending—that could be operated for a substantial period against the public interest. When the Restrictive Practices Court found an agreement against the public interest there was the possibility that the court order might not prevent the parties making another agreement similarly to inhibit competition. The obligation upon the registrar to refer all registered agreements to the court was unnecessary and wasteful, as a substantial number of agreements were abandoned by the parties before the case was referred. Elaborating some of the weaknesses, Mr. Stich states that, before the Act, an agreement naturally set out the obligations of the party as forthrightly as possible. There was now an incentive to present the obligations in such a form that, if possible, registrability under the Act became doubtful. Another problem was that "open price agreements" had spread widely over industry in substitution for the price agreements that had been condemned or abandoned by virtue of the 1956 Act.

Electric Hair Curlers

"WHICH?" HAS RESERVATIONS

ELECTRIC hair curlers and tongs have been investigated by Consumers' Association, whose findings are published in the January issue of the Association's publication *Which?* None of the products tested was reported on as completely satisfactory electrically, but "most members were enthusiastic about their heated rollers." A majority favoured Carmen roller sets, which alone did well in all tests. *Which?* points out, however, that the Carmen rollers are "very expensive." All ten cheaper sets tested had some fault, and though most manufacturers have since said that their sets have been modified, "in the form we tested them it is difficult for us to recommend these sets unreservedly." For users who are willing to heat the rollers on a stable, upright domestic iron the Topset (available from *TV Times*) is chosen as best buy. Most women said they found electric tongs difficult to handle, especially on short hair. Four such tongs were tested, of which the Pifco Standard was found safest electrically.

Pharmacy Management

FELLOWS AND OFFICERS OF INSTITUTE PROFESSOR Haakon Bang, M.Sc., Ph.D. (professor of pharmacy administration, Washington State University) and Mr. Nicholas A. Herdman, F.P.S. (managing director, Duncan, Flockhart & Evans, Ltd.), have been designated *Fellows* of the Institute of Pharmacy Management. Messrs. B. J. Thomas, F.P.S., D.B.A., and T. G. Booth, B.Pharm., F.P.S., have been elected *Chairman* and *Vice-chairman* respectively of the council of the Institute. Mr. D. H. Maddock, B.Pharm., M.P.S.,

has been elected to the council of the Institute. The full programme of the third annual conference to be held at Matlock, March 11-13 (see *C. & D.*, January 14, p. 25 and 47), is now available from the Institute, 27 Park View, Hatch End, Middlesex.

Dairy Chemicals

OFFICIALLY APPROVED PRODUCTS

THE Ministers of Agriculture, Fisheries and Food and of Health have approved as dairy cleansers Applied 4-97 sodium hypochlorite (Applied Chemicals, Ltd.); Bactron and Rinsan mark III (Hadleigh-Crowther, Ltd); Cordos extra bleach (agricultural grade) (Stephenson Clarke, Ltd.); Deosan hypochlorite steriliser, Diversey Deosan detergent steriliser, Diversol BX (Diversey (U.K.), Ltd.); Fosdine (Carbon Chemicals); Hensol CX (J. Henshaw & Co., Ltd.); M.I.V. germicidal (M.I.V. Products (Batley), Ltd); Sterex (Anglo Pennsylvanian Oil Co., Ltd. and English & Warringham, Ltd.); Vanodine 4-10 and 5-10 (Vanodine, Ltd.) Details are in Circular FSH 69/66 (H.M. Stationery Office, price 8d.).

SCOTTISH NEWS

N.H.S. Remuneration

TRIBUNAL HEARING ARRANGED

THE tribunal considering the Scottish chemists' claim for increased remuneration for dispensing National Health service prescriptions (see *C. & D.*, December 3, 1966, p. 534) is to hear oral evidence at a private hearing on March 6, 7 and 8. The tribunal's chairman is Mr. J. P. H. Mackay, Q.C.; other members are Mr. G. D. H. Dewar, C.A., and Professor A. D. Campbell (professor of applied economics, Queen's College, Dundee).

IRISH NEWS

THE REPUBLIC

Students' 'Mini-congress'

FIRST OF ITS KIND IN IRELAND

PREPARATIONS for the international "mini-congress" of pharmaceutical students being held in the College of Pharmacy, Dublin, February 10-14, are now complete. The Irish Pharmaceutical Students' Association state it is the first time such a venture has been attempted in the Republic although annual events are held in Scandinavia. London-based students from South Africa, Australia and New Zealand are among the 100 overseas students attending. Theme of the Congress is "A Change in Approach is Needed". Topics for debate include "The Individual and the Student World"; "Education and the Student"; and "The Pharmacist and his Profession". Social functions arranged are a visit to the Abbey theatre, to the Ireland-England rugby international on February 11 and a dinner and dance at Dublin airport on February 13. Tickets (price 30s. each, students 25s., limited to 230) can be obtained from Vincent Cronin, 9 Maywood Park, Raheny, Dublin, or c/o College of Pharmacy, Shrewsbury Road, Dublin.

THE NORTH

THE Londonderry and Strabane Chemists' Association has been re-named North-west Chemists' Association. Mr. D. J. Duffy, 34 Argyle Terrace, Londonderry, replaces Mr. E. J. O'Hare as secretary.

THE associates' section of the Ulster Chemists' Association are holding their annual dinner and dance at the Conway Hotel, Dunmurry, at 8 p.m. on February 1. Tickets (price 30s. each) are available from the U.C.A. office, 73 University Street, Belfast.

IRISH BREVITIES

THE REPUBLIC

A "HIGHLY successful" dinner and dance was held by the West of Ireland Chemists' Association in Tuam on January 4. President of the Association (Mr. E. Horan, Sligo), presided. The local committee comprised Mrs. A. T. Feely and Messrs. P. J. Kilgariff, T. Leo, and M. Farrell.

THE Minister for Health (Mr. S. Flanagan) formally opened the Sterile Supply Centre, Finglass Road, Glasnevin, Dublin, on January 12. The centre is a non-profit-making institution that will purchase, package, sterilise and supply to hospitals such items as surgical clothing, dressings and instruments. The service is being limited initially to hospitals in Dublin although it is expected to expand to the rest of the country later.

NEWS IN BRIEF

THE index of retail prices in December 1966 was 118.3 (January 1962=100), compared with 118.1 in November.

ONE chemist each in Bowness and Windermere is being allowed to close on Thursdays during the months of October, November, January, February and March. [Correction.]

THE National Health Service (Family Planning) Bill, published on January 17, is intended to enable local health authorities to provide services in connection with contraception with the help of State funds. An authority would be able to charge for the service according to the means of the patient.

A PILOT scheme of short courses for industry is starting at the University of Aston in Birmingham and at selected technical colleges in the West Midlands. The courses are designed to raise industrial effectiveness and promote economic growth and are the subject of an article in the January edition of *On Course*, issued by the Department of Education and Science.

THE Minister of Health has put to the Regional Hospital Boards for the East Anglia and South-west Metropolitan Regions a proposal that the Ministry of Health should plan, design and supervise the construction of a new district general hospital in each Board's area: at Bury St. Edmunds and Frimley, near Aldershot, respectively. The hospitals are being regarded by the Ministry and the Boards as practical development projects to test how economically a hospital can be planned and built.

TOPICAL REFLECTIONS

By Xrayser

Deletions and Additions

Those who are granted a fair span of life become attuned to the loss of old friends, and the circle of such acquaintances is not always, and not necessarily, human. With what appears to be increasing frequency we are presented with proposed or tentative lists of drugs and preparations scheduled for deletion from future editions of the British Pharmacopoeia or the British Pharmaceutical Codex. We of an older generation sometimes experience a sense of shock at the, at first glance, preposterous suggestion that some galenical should be dropped from one or other of those volumes, but if we take a practical view of the situation we realise that we are thinking in terms of the demand for it in our younger days and not the occasional inquiry of today. And if we, now in the veteran class, feel that the changes are made ruthlessly, it must be remembered in our defence that for almost a score of years one edition of the B.P. sufficed, and most of the preparations contained therein were in daily use. In fact, if anyone had suggested that in another thirty years few of those drugs and galenicals would ever be heard of, he would have been laughed to scorn. But each successive volume has brought its own deletions and additions, and now I have to look at the title page to convince myself that I am looking through the pharmacopoeia. The publication of tentative lists for the B.P.C. of 1968 (p. 52) is a further example of the changing pharmaceutical world. Is it possible that cinchona, the wonder drug of the 17th and 18th centuries, is to vanish from the scene? What would Dr. Cullen have thought of that? Or Cardinal de Lugo? (As one might almost have expected, quinine goes at the same time.) Buchu is another victim, but the aroma of its fresh infusion is today only a fragrant memory. It is possible, also, to be philosophic in the matter of jalap and its resin, and few will mourn the departure of ipomea. And one must be quite frank about gall and opium ointment, which has been supplemented by a hundred different ointments, all ready packed in tubes and cartons.

Gregory and Hamilton

The members of the committee responsible for the tentative list, apparently emboldened by the immunity from disaster of the B.P. Commission which deleted Dr. Gregory's powder from a recent edition, have now suggested the striking out of another of that doughty physician's prescriptions in the form of compound colocynth pills. Not content with that, they have also listed the pills of colocynth and hyoscyamus, associated with Dr. James Hamilton, the younger, powerful adversary of Gregory in wordy battles of long ago. The committee members have taken a risk in flouting both at the same time, for if they have contrived by their action to form a ghostly alliance they may tremble at the consequences. A reading of history might have stayed their hand. But such is the speed of change today that one sees the deletion of substances unknown even thirty years ago. One bright ray appears in the additions—fresh bitter-orange peel! Is there to be a formula for marmalade? And where will one get supplies out of season? For whatever reason it appears, cort. aurant. amara has a more euphonious sound than dextropropoxyphene napsylate.

Further restriction

Other "tentative proposals" are fraught with much greater inconvenience to the pharmacist. It is announced (p. 49) that the antihistamine substances, on the recommendation of the Poisons Board, are to return to the Fourth Schedule, whence they came only a few short years ago. The bald announcement, as you note in your leader on the subject, gives no reasons for the recommendation. It may be, as you suggest, that the Board has information making the change desirable, and you may be right in associating the decision with the effects of the drug on car drivers. Yet I see no sign of authority making alcohol more difficult of access, and its effects on drivers are reported with the greatest frequency. I feel sure that that is a much more common offence than being found incapable owing to the action of antihistamines. I have seen no evidence of addiction to the drug, but signs are not wanting of uncontrolled alcoholic excess.

"SAVE ON DRUGS, LOSE ON CURRENCY"

Spokesmen of the industry expose the dilemma

THE understandable desire of the Ministry of Health to purchase medicines cheaply for the National Health Service should not be allowed to override the greater national need for the country to earn the maximum foreign exchange from pharmaceutical exports. So said both MR. G. J. WILKINS (chairman, Beecham Research Laboratories) and MR. C. R. B. WILLIAMSON (managing director, Winthrop Products Company) at the first of four 1967 evening meetings of the Office of Health Economics on January 17. General theme of the series was "Innovation and the Balance of Payments: The Experience of the Pharmaceutical Industry." Chairman was Dr. Donald Gould (editor of the *New Scientist*).

MR. WILKINS said that it was essential that research into new medicines should be carried on in both academic institutions and the laboratories of pharmaceutical companies. It was difficult enough to choose an appropriate new research project, but much more difficult to stop it or change its direction if the original idea was obviously leading nowhere. It was not often realised that a company making a determined effort to enter the pharmaceutical industry must be prepared to make a big and continuing investment in research with no guarantee of the success. No company without substantial profits from other activities could hope to sustain the necessary effort and continued losses. Within the organisation of Beecham Research Laboratories, a large new antibiotic manufacturing unit was under construction at Worthing, whilst activities were in progress for the discovery of semi-synthetic penicillins. That was largely an act of faith. It presupposed that the company would discover commercially useful products. In fact over £2 million had been spent on research and over £3½ million had been irrevocably committed on building a factory before it was known that there would be one compound worth marketing.

Royalties No Substitute for Profits

To ensure the rapid development of the company's new products overseas a programme of selective licensing had been embarked upon. The company's royalty income was now substantial and still increasing (it was £1½ million in the last financial year), but royalties were no substitute for the profits arising from the sale of a company's own brands. Commercially, therefore, the target was to build up as quickly as possible a network of arrangements whereby products under the company's trade marks were available overseas in competition with royalty-bearing equivalents marketed by Beecham licensees.

Britain, said Mr. Wilkins, represented at most 7 per cent. of the potential world-wide market for antibiotics. Thus overseas sales of the new or semi-synthetic penicillins could be built to many times the size of their United Kingdom business. But if the Government in Britain forced the

company to reduce its prices, there would be inevitable pressure or obligation to reduce prices overseas.

MR. WILLIAMSON underlined the same point. Pressures to reduce prices existed in one form or another throughout Western Europe, and it was not surprising that when the Ministry of Health depressed the price of a proprietary in the United Kingdom foreign authorities pressed for similar action. Savings secured to National Health Service could, in the event, be less than the resultant loss of foreign currency.

Mr. Williamson emphasised the importance of new patented products in building pharmaceutical exports. Primitive countries used few manufactured medicines while developing countries depended to an increasing extent on locally manufactured "common" [unpatented] drugs, such as penicillin, phenobarbitone and aspirin. Advanced countries could also manufacture such products locally more cheaply than they could be imported. Thus international trade in pharmaceuticals would depend in the future mainly on the branded and patented innovations resulting from current pharmaceutical research.

Effective marketing was essential for such products both at home and

abroad. Asked if his company had autonomy in its research programme, Mr. Williamson said there was complete authority in the direction of the company's research work and it was fortunate in being "backed both ways" because the experience of 600 graduates of the United States parent was shared with the 130 graduates working in Britain. In reply to a question MR. WILKINS said that his company's success rate from research so far was above the national average. He attributed that to the fact that the research team concentrated its work in a limited field. Asked what would be the effect on British pharmaceutical exports of the lessening of tariffs between countries in the Common Market, MR. WILLIAMSON said that they had a unit in France, but would find it better economically to handle production in one large plant rather than in two smaller ones. MR. WILKINS said that if Britain did not enter the Common Market his company might consider exporting intermediates and complete the final stages of manufacture in one of the member countries. To a now familiar and emotional question "is it right to make profits out of people who are ill?" MR. WILLIAMSON pointed out that laundrymen and doctors were among many others who had always done so. DR. GOULD said that it was no more wrong to do that than for Lord Sainsbury to make money out of hunger.

BIOGENESIS OF ALKALOIDS

Two lectures at the school of pharmacy, University of London

BIOSYNTHESIS in higher plants is a step-wise process that starts with carbon dioxide as the sole carbon source and culminates in the formation of such diverse compounds as terpenes, chlorophyll, pigments and alkaloids. The process may be examined from either end. Calvin examined the first few steps: the fixation of carbon dioxide. PROFESSOR A. R. BATTERSBY, D.Sc., F.R.S., on the evenings of January 19 and 20, gave his account of the last few steps in the chain: the determination of the structures of some alkaloids and of their precursors, and the nature of the synthetic steps involved. He was describing to an audience drawn from all levels in the profession of pharmacy, some aspects of the first-rate structural and reaction mechanism studies that have been carried out in the past few years by his group at the University of Liverpool. The occasion was the giving of two special university lectures in pharmacy, arranged by the University of London and delivered at the school of pharmacy, Brunswick Square.

The theme was the discovery of precursors in alkaloid synthesis and some of the problems arising in showing that a compound is in fact a true precursor. Professor Battersby's group is one of the foremost in the world in the use of radioisotopes to characterise reactions occurring in plants. The first precursor he mentioned was tyrosine. About ten years ago papaverine was shown by radiochemical techniques to be formed from two molecules of tyro-

sine. That was hailed at the time as a remarkable achievement. Nowadays, however, with the rapid rate of improvement of methods, the attainment of a result of that sort would be regarded merely as a normal preliminary to a much more detailed examination of mechanism.

Professor Battersby then illustrated the trials and tribulations that can arise in precursor characterisation. Work on cinnamic acid and phenylalanine showed that both were used in the building-up of the colchicine molecule. A compound formed by joining those two molecules together, which on paper looked a good prospect as the immediate precursor, was—at considerable effort—synthesised in a labelled form. It turned out not to be the precursor at all. To be very careful about the exact stereochemical form is also necessary; in the case of androcymbine, the precursor of which has a specific rotation of only about 1°, only one stereoisomer is acceptable to the plant.

The phenethyl-isquinoline skeleton, containing 17 carbon atoms, has been found in several alkaloids, and one of them, kreysigine, occurs in *Kreysigia multiflora*, a relative of the autumn crocus. Here nuclear magnetic resonance methods come into their own, because one position on the skeleton is peculiarly strongly shielded and a methoxy group attached there appears only at high field strengths.

One of the most complex radiochemical labelling experiments of its type formed the concluding topic of

Professor Battersby's exposition. Berberine chloride can be generated from a benzylisoquinoline system by oxidative ring closure, giving what is called a "berberine bridge". The precise mechanism of this reaction was elucidated for the formation of chelidonium and stylopine, which both occur in the greater celandine, from their common

precursor, scoulerine. Labelling at about 15 positions in the molecule was utilised, bearing out the lecturer's claim that properly designed tracer experiments, with effective cross-checks by isolation and dilution, reinforce greatly the range of validity of the results that can be achieved by degradative and synthetic methods.

IN PARLIAMENT

BY A MEMBER OF THE PRESS GALLERY, HOUSE OF COMMONS

THE CHANCELLOR OF THE EXCHEQUER (Mr. James Callaghan), in a written answer on January 17, informed MR. RONALD LEWIS that nearly all the representations he had received concerning decimal currency supported the proposal. Opinion was more divided on the method but as no arguments had been put forward that the Government had not already taken into account there was no reason to reconsider the decision the Government had taken. The following day MR. G. T. C. CAMPBELL asked the President of the Board of Trade about the representations he had received from the retail and distributive trades regarding the advantages of the decimal currency based on a 10s. unit over one based on a £1 unit. MR. GEORGE DARLING (Minister of State), in a written answer, said he had received letters from the National Chamber of Trade and the Drapers' Chamber of Trade favouring the 10s. system.

Cyclamates

MR. N. P. SCOTT asked the Minister of Agriculture, Fisheries and Food what further research into the risks of excessive intakes of cyclamates should be carried out in the interests of the health of the nation. MR. J. H. HOY said that the Minister of Agriculture was considering the report of the Food Additives Committee (which had recommended that the present restrictions on the use of cyclamates in food should be removed) and the representations that had been made concerning the Committee's recommendations. The Minister hoped to announce his decision as soon as that was possible. MR. HOY pointed out that it was normal practice for the commercial interests that wished to use food additives to conduct the new research work that might be necessary to demonstrate their safety in use. The Government then evaluated the research work with a view to deciding whether the use of the product concerned should be permitted.

Herpes Virus Infection

MR. GEOFFREY LLOYD asked the Secretary of State for Education and Science what assistance he was giving to investigations into methods of alleviating the effects of herpes simplex, commonly referred to as cold sores, and whether he would make a statement on current progress. MR. GORONWY ROBERTS (Minister of State), in a written answer on January 19, pointed out that the studies relating to herpes virus infection formed part of the Medical Research Council's wide programme of fundamental research in the general field of virology. It was hoped

that the research would increase knowledge of viral infections, including herpes simplex, thus contributing to the development of methods of treating such infections.

Dispensing Doctors

MR. F. L. PYM asked the Minister of Health on January 23 whether he would ensure that the right of doctors with rural practices to dispense medicines direct to patients would not be affected by any new arrangements he proposed to make. MR. KENNETH ROBINSON (Minister of Health) replied "This right exists only in relation to patients living more than a mile from a chemist in rural areas or satisfying the Executive Council that they would have serious difficulty in getting to a chemist, and who request their doctors to dispense for them. The intention is that doctors should still be able to dispense medicines for patients who would otherwise have serious difficulty in obtaining them from a chemist because of distance or inadequacy of communications." MR. PYM: Does that reply mean that the arrangement for the future will remain exactly as it is now, or is the Minister saying that he will make it more difficult for some patients in the countryside? — MR. ROBINSON: The net result will not make it more difficult for patients living in the countryside. Discussions with representatives of the medical and pharmaceutical professions on the introduction of the changes are currently in progress.

Fluorides

MR. D. H. HOBDEN asked the Minister of Health if he would ban the advertising of fluoride compounds for use by pregnant women in preventing dental caries in offspring. MR. KENNETH ROBINSON, in a written answer on January 17, said he saw no justification, "on grounds of safety or otherwise," for such a ban.

LEGAL REPORTS

Use of Name Forbidden

IN the High Court, London, on January 18 Mr. Justice Buckley granted Dr. Madaus & Co., of Cologne, W. Germany, manufacturers of pharmaceutical and dietary products, an order forbidding Madaus Laboratories, Ltd., Marcar House, Parkshot, Richmond, Surrey, from carrying on business as chemists or druggists or manufacturers or dealers in pharmaceutical or dietary products under the name Madaus. Messrs. G. Marcar, A. Marcar and E. F. J. Perkins, the defendant company's directors, were forbidden to cause the

name to be used in connection with any such business. The judge directed that there should be an inquiry as to damages and awarded Dr. Madaus & Co. costs against the defendants, who did not contest the action. For Dr. Madaus & Co., it was said that the company had a world-wide trade, and their products were marketed extensively in the United Kingdom. Madaus Laboratories, Ltd. was incorporated in 1964, and the defendants' use of the name would lead to the belief that the two businesses were connected and would cause confusion. The defendants, who had been asked to change the name of Madaus Laboratories at first neglected to do so, though it was believed that the name had now been changed.

Two Patents, One Licence

THE Patent Office on January 12 ordered the grant of a compulsory licence under patent No. 813,861 to Biorex Laboratories, Ltd., London, E.C.1. Patent No. 813,861 is owned by Smith Kline & French Laboratories, Ltd., Welwyn Garden City, Herts, and under it they manufacture and sell trifluoperazine (Stelazine). The manufacture and sale of trifluoperazine (Stelazine) is however also covered by patent No. 857,547, under which patent no compulsory licence has been granted.

COMPANY NEWS

Previous year's figures in parentheses

IMPERIAL CHEMICAL INDUSTRIES, LTD.—Lord Glenconner is to retire from the board on March 31.

GILLETTE INDUSTRIES LTD.—Mr. C. A. Ganderton has been appointed marketing director with responsibility in the United Kingdom for all group products.

GEIGY (U.K.), LTD.—Dr. Louis von Planta has been appointed to the board to succeed Mr. C. E. Koechlin, who continues as chairman of the parent company, J. R. Geigy, Basle, Switzerland.

PHOTAX (LONDON), LTD.—Final dividend, 13½ per cent., making 21 per cent. (same) for year to October 31, 1966. Group net profit is £87,916 (78,272), after tax of £68,497 (£38,494).

HILGER & WATTS, LTD.—Sir John Paget has been appointed to the board and Mr. J. R. Stansfield, as technical director. Mr. R. Stanley has retired as sales director, but is remaining on the board. His responsibilities for home sales have been assumed by Mr. W. Bamford.

DREAMLAND ELECTRICAL APPLIANCES, LTD.—A loss of £12,334 is reported for the half-year ended August 31, 1966 (against the £76,702 loss for the same previous year period). There is again no interim dividend. (The last distribution was 47½ per cent. total for 1963-64.)

WINTHROP PRODUCTS CO.—Sales of prescription medicines to Continental Europe during 1966 at £4 million were 16 per cent. up on the previous year. A £100,000 contract to supply prescription medicines to the

U.S.S.R. has been successfully negotiated by the company. [Messrs. Winthrop are the exporting organisation of the Bayer Products Co.—Corrected note.]

SANDOZ PRODUCTS, LTD.—Mr. A. D. Ferns has been appointed sole managing director following the return to Basle of Mr. J. P. Christen. Mr. S. L. Maguire will be a full member of the board of management of the company representing the pharmaceutical department. The management of the pharmaceutical department will be in the hands of a committee consisting of: Mr. S. L. Maguire (marketing); Dr. D. S. Freestone (clinical research) and Mr. R. F. Weir (production).

RICHARDSON & STARLING, LTD., which has been associated with the Hickson group of companies since 1960 has, by mutual consent, severed the connection and resumed independent trading. Financial control is vested in S. A. Richardson, Ltd., a private limited company. Chairman of both companies is Mr. S. A. Richardson. Other directors are: Messrs. F. Boulton, N. S. Fountain, I. D. M. Gibb and T. C. Shooter (managing director, Richardson & Starling, Ltd.). R.O. 21 Hyde Street, Winchester, Hants. Orders and advice bureau: Wormwood Street, London, E.C.2 (telephone: AVENUE 6685).

SANGERS, LTD., and EVANS GADD, LTD.—Negotiations have been concluded for the sale of the Bristol branch of Sangers, Ltd., to Evans, Gadd & Co., Ltd., with effect from February 25. (An announcement by Sangers, Ltd., appears on advertisement page 4.)

ELI LILLY & CO., Indianapolis, U.S.A.—Sales in 1966 are estimated at £131 million or £17.9 million higher than in 1965. Net income rose from £14.9 million in 1965 to a record £17.7 million in 1966. The company's president (Mr. E. N. Beesley) said on January 17 that in Britain the £1½ million Lilly Research Centre, Ltd., at Windlesham will become operational, the £1 million construction project to expand the antibiotic manufacturing capacity of Dista Products, Ltd., at Speke will be completed, and Eli Lilly and Co., Ltd., at Basingstoke would increase facilities for making hard gelatine capsules. Projects mentioned by Mr. Beesley included new plants in California, Indianapolis, Formosa and Puerto Rico.—Mr. D. Joyce has been appointed managing director of Eli Lilly & Co., Ltd., Basingstoke. Mr. R. C. Hagerman, whom he succeeds, is appointed director of capsule operations in Indianapolis.

WELLCOME FOUNDATION, LTD.—Sales for the year ended August 31, 1966, amounted to £43,834,000 (£36,514,000) and pre-tax profits to £5,690,000 (£4,575,000). Giving those figures—the first such figures to be disclosed by the Foundation (which is a private company)—the chairman (Sir Michael Perrin), pointed out at the annual meeting on January 26 that the whole of the increase in sales and profits had come from sales unconnected with the National Health

Service and for the most part from sales overseas. Of the total sales of £43m., almost £14m. (against £11½m.) was attributable to the Cooper, McDougall & Robertson companies, whose interests were outside human medicine. Altogether more than £32m. of the whole group's sales were in countries overseas. Sir Michael added that sales of the Foundation ten years ago amounted to no more than £13.8m. Over the past five years group's pre-tax profits had increased by an average of 17½ per cent. per year. In the year under review a distribution of £1,400,000 had been made to the Wellcome Trustees (same in the previous year). Although that represented a comparatively small distribution in relation to the 1965-66 earned profits, the need had been recognised for the retention of adequate profits in order to finance expansion. The balance sheet showed fixed assets and companies not consolidated at £15,823,000 and a surplus of net current assets of £7,758,000. "The true worth of the company," said Sir Michael, "is considerably in excess of this figure and cannot be regarded as being in balance with the issued capital, which has recently been increased to £17½m. The fact that the sole shareholding is in the hands of the Wellcome Trustees makes this of relatively little importance." World-wide, the group total expenditure on research and development amounted to £2,756,000, which was not much greater than in the previous year. Sir Michael said the results of the group for the year were evidence that it was against the national interest and that of medicine in the United Kingdom to attempt to judge the pharmaceutical industry and its profitability solely in terms of the cost of its products to N.H.S. "Without diversification, in terms of products and geographically, it would certainly be impossible for the Foundation to invest in research and development on the present scale or to distribute to the Wellcome Trustees the funds which they now have for the general advancement of knowledge through the support of research."

BUSINESS CHANGES

MR. S. ARNOLD KAYE, F.P.S., has closed the pharmacy side of his business at 626 Durham Road, Gateshead, 9, and is now operating the premises as a health food store.

E. R. SQUIBB & SONS, LTD., are transferring their order department to Moreton, Wirral, Ches. (telephone: 051-677-2201) on February 1. The head office remains at Regal House, Twickenham, Middlesex.

MR. H. CLARKSON, M.P.S., is having to close his pharmacy at 113 Elland Road, Leeds, 11, the premises being scheduled for demolition shortly. Upon closure Mr. Clarkson intends to retire.

SAMMES (CHEMISTS), LTD., are closing their branch at 84 London Road, London, S.E.1, on January 28, because of a compulsory purchase order. The business is to be transferred to 229 Blackfriars Road, S.E.1.

JOHN BELL, HILLS & LUCAS, LTD., London, S.E.26, are closing down in March. When the company was taken over by Nestle Le Mur Co., New York in 1964, 50 per cent. of its products were sold in the home market and 50 per cent. were for export.

MR. AIDAN MURPHY, M.P.S.I., Ballyphehane, co. Cork, Eire, has bought the pharmacy of the late Mr. F. Holly, M.P.S.I., Youghal, co. Cork, and **MRS. WILLOUGHBY** has transferred her interest in the pharmacy of A. L. Doran, Ltd., Bray, co. Wicklow, to Mr. T. Lawlor. The pharmacy of W. F. Wells & Co., Baginbun, Dublin, owned by A. C. Boles, Ltd., has been sold to a non-pharmaceutical company.

DCMC MANUFACTURING, LTD., is the new trading title of the Dudley Court Machine Co., Ltd., and **DCMC/BARDO AEROSOL PACKING CO., LTD.**, the new title of Bardo Aerosol Packing Co., Ltd. These changes are designed to indicate more clearly their association within the DCMC group, which has production facilities at Haverhill, Suffolk, and offices at 291 Edgware Road, London, W.2.

Appointments

COTY (ENGLAND), LTD., 3 Stratford Place, London, W.1, have appointed the following area managers: Messrs. A. Bogie (South-west area); P. Hill (Midlands); T. Naismith (South-east); L. Nicol (Scotland) and E. Williams (North).

MICHAEL DENHAM, LTD., Catherine Wheel Road, Brentford, Middlesex, have appointed the following representatives:— Messrs. W. B. Quiggin (Northumberland, Cumberland, Westmorland, Durham, Middlesbrough); E. C. Snape (Derbyshire, Nottinghamshire, Lincolnshire, Northamptonshire, Leicestershire, Peterborough); K. H. Turner (Isle of Wight); and Mrs. C. D. Newland-Walch, London postal districts N., N.W., E.C. and W.C., in addition to her existing area.



HANDING ON: The outgoing chairman of the Proprietary Articles Trade Association (Mr. P. J. Lushington) invests his successor (Mr. G. H. Walker) with his chain of office.

PERSONALITIES

MR. F. JESSUP, a director of Rank Audio Visual, Ltd., is retiring in April. Mr. Jessup's forty years in the photographic industry have been spent with the Rank organisation and its predecessor companies. He plans to spend half

of each year in the United States and the other half in the United Kingdom.

Mr. T. J. McCARTHY, the recently appointed managing director of Thermos, Ltd., joined the company in June 1964. Until his new appointment he was the home sales director and during the last three years has reorganised the marketing function of the company. Before joining Thermos, Ltd. his experience in sales and marketing ranged from pharmaceuticals and toiletries to household products.

MR. H. A. E. SPALDING, M.P.S., The Corner House, Forest Hill, Oxford, has retired from Fisons Pharmaceuticals, Ltd., for health reasons. Mr. Spalding joined Genatosan, Ltd., in 1938 as a representative, later becoming pharmaceutical sales manager. With the formation of Fisons Pharmaceuticals, Ltd., he became head of technical information services and public relations officer.

MR. J. J. PEMBERTON, M.P.S., recently appointed marketing director of the pharmaceutical division of Geigy (U.K.), Ltd., in succession to Mr. S. W. Kipling, qualified as a pharmacist at Liverpool in 1946. He worked in retail pharmacy and with Pfizer, Ltd., before joining Geigy (U.K.), Ltd., in April 1958 as a medical representative. In 1959 he was made an area manager and in the following year moved to the company's headquarters in Manchester as a technical service executive. He was appointed professional service manager in July 1962. Mr. Pemberton is a member of the Manchester Branch of the Institute of Marketing, and a member of the Institute of Pharmacy Management.



PROFESSOR ALAN RUSHTON BATTERSBY, who gave two lectures at Brunswick Square on January 19 and 20 (see p. 74), has occupied the second chair of organic chemistry, University of Liverpool, since March 20, 1962. Professor Battersby was educated at Leigh grammar school and the University of Manchester, where he graduated B.Sc. with first-class honours in 1946 and M.Sc. in 1947. He was admitted to the degree of Ph.D. in 1949 at the University of St. Andrews. From 1941 to 1943 he held a post in the chemical research laboratory of British Insulated Callenders Cables, Ltd. In October 1948 he was appointed lecturer in chemistry at the University of St. Andrews, and in 1950 was awarded a Commonwealth Fund Fellowship, and studied for one year at the Rockefeller Institute for Medical Research, New York, U.S.A. The Fellowship was extended for a second year, which he spent at the University of Illinois, undertaking research in biochemistry. He returned to the University of St. Andrews as lecturer in chemistry in June 1952, and in

January 1954 was appointed lecturer in chemistry at the University of Bristol. He was awarded by the Chemical Society in 1959 the Corday-Morgan medal and prize. Professor Battersby was elected to Fellowship of the Royal Society in 1966.

OVERSEAS VISITS

A FIVE-MAN team, representing the Association of the British Pharmaceutical Industry, arrived in Beirut, Lebanon, on January 23, from London on a tour of Middle Eastern countries. The team, led by Mr. Gordon W. Nosotti, is on a fact-finding visit to Arab countries, under the auspices of the British Export Council. It was due to leave for Amman, Jordan, on January 27.

PROFESSOR A. M. COOK, who occupies the chair of pharmaceuticals (microbiology), London University, and is a member of the Council of the Royal Society of Health, is touring North America and the Far East. Professor Cook is also chairman of the pharmaceutical group, as well as of its luncheon club. He will be making informal contact during his tour with the R.S.H. Malaysian, New South Wales, Queensland, Western Australia and Fiji examination boards.

DEATHS

BRAMHILL.—On December 14, 1966, Mr. Thomas Wilfred Bramhill, M.P.S., Rosegarth, High Street, North Thoresby, Lincs. Mr. Bramhill qualified in 1922.

BURKE. — Recently Mr. Thomas J. Burke, B.A. M.P.S.I., Buttevant, co. Cork, Eire, aged eighty-four, Mr. Burke qualified as a pharmacist in 1920. At one time he had a pharmacy in Cavan, and later managed a pharmacy at Clontarf for Mr. H. P. Corrigan. For a period of five years Mr. Burke was an examiner to the Licence examination conducted by the Pharmaceutical Society of Ireland. The funeral was attended by Messrs. H. P. Corrigan and G. C. O'Neill (members of Council of the Pharmaceutical Society of

Ireland) J. G. Coleman (registrar), H. Palmer and S. McAuley.

HEMINGWAY.—On January 2, Mr. Ralph Hemingway, M.P.S., 1 Natal Road, London, N.11. Mr. Hemingway qualified in 1912.

HOPPER.—On November 25, 1966, Mr. Eric Hartley Hopper, M.P.S., 15 Iyymount Road, Newcastle upon Tyne, 6. Mr. Hopper qualified in 1920.

LYON.—During 1966, Mr. Thomas Arthur Lyon, Ilford, Essex, aged eighty-four. Mr. Lyon will be remembered by many pharmacists as the London representative for A. & F. Pears, Ltd., for over thirty years before his retirement.

VIAL.—On January 9, Mr. Percy George Viall, M.P.S., 29 Goring Road, London, N.11. Mr. Viall qualified in 1937.

N.H.S. STATISTICS

IN EAST SUSSEX during the year ended March 31, 1966, pharmaceutical services cost £2 17s. 1d. per head of population in the country compared with £2 1s. 10d. in previous years.

IN BATH contractors dispensed during October 1966 40,584 prescriptions (26,186 forms) at a total cost of £21,900. Average total cost per prescription 129.51d.

IN THE ISLES OF SCILLY during October 1966, 688 prescriptions (525 forms) were dispensed. Total costs were £460, an average of 160.59d. per prescription.

IN LINCOLN during October 1966 41,483 (27,593 forms) were dispensed by contractors at a total cost of £21,851. Average total cost per prescription 126.42d.

Contractors in MANCHESTER during October 1966 dispensed 386,144 prescriptions (251,794 forms). Total cost amounted to £190,289, an average of 118.27d. per prescription.

IN WALSALL during September 1966 87,856 prescriptions (57,076 forms) were dispensed totalling £41,218. Average cost per prescription: 112.6d.

ATTRACTING RECRUITS TO THE INDUSTRY: On January 12 & 13 five pharmaceutical companies in Hertfordshire — Riker Laboratories, Roche Products, Ltd., Merck Sharp & Dohme, Ltd., Smith Kline & French Laboratories, Ltd., and Smith & Nephew Pharmaceuticals, Ltd. — co-operated to organise for students from grammar schools and colleges of further education in the county two half-day conferences on the general theme "Careers in the Pharmaceutical Industry." Nearly 300 students, teachers and Youth



Employment Officers attended the two events, which were held in the hall of the Hatfield Technical College. Each of the companies concerned supplied specialist speakers to present a picture of the industry to the audience. The picture shows, seated Messrs. A. Marsh (production manager, S. & N. Pharmaceuticals), L. R. Finucane (U.K. marketing director, SK & F) and Malcolm Wright (Association of the British Pharmaceutical Industry), and standing, Mr. J. Davidson (head of the veterinary laboratory, M.S.D.), Dr. R. F. Long (head of the biochemistry section, Roche) and Mr. J. A. Edwards (administrative executive, research, Riker).

BRANCH EVENTS

PLYMOUTH

Pantomime Outing

A PARTY of friends of the Plymouth Branch of the Pharmaceutical Society travelled to Torquay on January 4 to attend the performance of the pantomime "Aladdin." A block booking had been made though members used their own transport. The show, starring the Barron Knights, was keenly appreciated by an audience made up largely of knowledgeable children who participated with "boo's" and "cheers" in time-honoured fashion. After the show, refreshments were taken at the theatre in a room reserved for the party. MR. L. A. SIMPSON (Branch chairman) voiced the appreciation of the party for their most enjoyable outing.

HARROW

Preservatives in Pharmaceuticals

THE problem of preserving pharmaceuticals from microbial contamination was discussed by DR. H. S. BEAN (Chelsea College of Science and Technology) at a recent meeting of the Harrow Branch of the Pharmaceutical Society, his audience comprising mainly hospital and industrial pharmacists. Dr. Bean said a recent report from Sweden had drawn attention to the fact that many tablets and pharmaceuticals in general use were contaminated — in some cases with high counts of pathogenic organisms. Contamination of tablets could be traced to the ingredients, starch being specially prone to bacterial contamination. The process of moist granulation provided excellent conditions for bacterial multiplication and more careful control of the quality of ingredients, and the maintenance of higher standards of hygiene in manufacturing processes, were called for. Dr. Bean next discussed work that had led to the inclusion of bacteriostats and bactericides in injection solutions. Recommended bacteriostatic agents and their concentrations varied in different national pharmacopoeias despite considerable experimental evidence to show that each antibacterial substance had an individual concentration exponent. Reducing the concentration of chlorocresol by half resulted, for example, in a 64-fold reduction in antibacterial activity. Rubber stoppers of multi-dose containers for injection solutions could absorb a high proportion of antiseptic from the solution unless previously saturated with the antiseptic. The organic mercurials had a much lower concentration exponent than the cresols. In complex pharmaceuticals, such as emulsions and creams, the nature of the ingredients had a considerable bearing on the activity of the preservatives. Partitioning of the preservatives between the oil and water phases could significantly reduce the concentration in the aqueous phase in which the bactericidal activity was needed. The nature of the oil and its proportion relative to the water content also affected the final concentration of preservative present in the aqueous phase. The type and quantity of emulsify-

ing agent could also affect preservative activity and additional ingredients might provide further interactions. For example, a liquid miscible with both phases might change the partition coefficient of the preservative. Some perfumes and flavouring agents themselves possessed antibacterial activity, and even in small amounts could augment the action of the other preservatives. Total effect of those and other possible interactions could not be accurately predicted, and thorough testing of any new formulation was therefore necessary. Such testing should include deliberate contamination with known organisms and subsequent examination over a period of weeks or even months. A vote of thanks was proposed by the branch's vice-chairman MR. L. P. EMERSON.

DUNDEE

Advertising

MR. W. M. DARLING (chairman of Pharmaceutical Society's Ethical Committee) asked his audience to consider their answers to two questions at a recent meeting of the Dundee and Eastern Scottish Branch: Do you wish to turn the clock back?; and do you wish to retreat from professionalism? Mr. Darling was speaking on "Advertising and Other Ethical Problems." Asked if he approved of the manufacturer's 1966 promotion of Haliborange tablets as compared with that of 1965 he said he did, since it introduced a large size at a more favourable price—a normal procedure in the medicinal field. The previous year's method compared rather with a bonus pack of soap powder. One member thought the scheme was only another means of offering a bonus, and objected strongly to the conditions of sale and supply. Another contended that the advertising costs of such schemes were borne by the consumer. Mr. Darling contended that no medicine should be offered to the public at bonus terms. Another member said he could not understand why the Council should disapprove of the Barclay-card scheme. The system was extensive in America. The speaker disagreed that Britain was bound to follow the American pattern of trading but if she did then the Council would, as always, continue to look at eventualities and would revise its decision if necessary. At present the month's credit offered was an inducement to shop at a particular pharmacy. To gain approval by the Council a cheque card must offer choice of any pharmacy. A rural member said that, in remote areas, there was virtually no contact with farmers, and the only means of informing them of new veterinary preparations was by way of a circular. Yet that was frowned on by the Council. MR. DARLING said there was some sympathy in that direction, and the subject was still under discussion. Evidence was being collected but his own view was that the information should be sent out as a manufacturer would send it, using no title. Other members expressed the view that in some instances the Council's decisions

were "hair splitting." While pharmacists were dropping titles in advertisements others, such as drug stores and herbalists, were increasing the size and number of their medicine advertisements. Mr. Darling said he hoped the new medicines legislation would change that. The most important thing was for pharmacists to set themselves up in a highly professional way. Total embargo on the use of the title in advertisements was the only fair way. It was now evident that ethical pharmacists in the United States were making great strides ahead of the commercialised premises. A vote on the proposed new rules went in favour of the Council.

ROMFORD

Silver Jubilee

CELEBRATING its quarter-century of independent existence (it splintered off from Southend and East Metropolitan) Romford Branch of the Pharmaceutical Society allowed a second innings of chairmanship to ex-cricketer MR. R. E. FRIZZELL. Though Mr. Frizzell has since switched his game to golf, he proved himself still good for a useful knock, even if he took his stance more nervously, by his own account, than twenty years ago. A declaration that he was giving the same speech he was able to make with little challenge, being the sole surviving founder member of the Branch and the only one, apparently, present on both occasions. When he came to welcome the representatives present ("It's my first half-day when I've been pleased to see them") he must have regarded them as bowlers. Why otherwise should he have said "We are not so bad when we're out as when we're in?" Among the spectators he had previously welcomed the chairmen of Colchester and Southend Branches, a former chairman of Romford Branch (MR. L. G. MINTER, now chairman of Mid-Kent Branch), doctors, dentists, opticians and the remainder of 233 diners present, and MR. A. R. RITCHIE replied on behalf of the guests and ladies. Dr. A. Denham, who proposed a toast to the Pharmaceutical Society, said his affection for it had been fostered by his friendship for Mr. Frizzell ("my local chemist for six years") while MR. ALLEN ALDINGTON (vice-president of the Society) who responded, professed how happy the president and Council were that Romford had arrived at its Silver Jubilee, how proud of its record and vigour. MR. C. P. HOWELLS pledged "The Romford and District Branch," and MR. J. D. MACKENZIE, who acknowledged the toast, gave an account of its foundation, history and distinguished sons, including Kenneth Holland (a former member of Council), John Davey (a former member of the N.P.U. Executive), and E. F. Hersant (general secretary of the British Pharmaceutical Conference). During the evening a golf cup (donated by Mr. Jordan in memory of his son) was presented to Mr. R. W. Slawson and a tombola organised to raise money for the Benevolent Fund realised £17.

SILVER JUBILEE

DINNER AND DANCE
18th JANUARY 1967

"FRIZZ" BY NAME
AND APPEARANCE
- J.D. MACKENZIE



TREASURER
J.D. MACKENZIE
(PAST CHAIRMAN
AND SOCIAL
SECRETARY)

M.S. FRIZZELL
SOCIAL SECRETARY
OF COMMITTEE

THE CHRONICLE
OF
ROMFORD BRANCH

DAVID SIMPKINS
SECRETARY
OF COMMITTEE

R.E. FRIZZELL
CHAIRMAN
(AND IN 1946)
ONLY FOUNDER
MEMBER PRESENT

DR. A. DENHAM
PROPOSED
TOAST TO
THE
SOCIETY

JOHN MORL
COMMITTEE
MEMBER

KENNETH
HOLLAND
MEMBER OF
COMMITTEE
(PAST
CHAIRMAN)

A.R. RITCHIE
"WHOLESALE"
REPLY TO TOAST TO GUESTS

DICK
SLANSON

WINNER
JORDAN
GOLF
TROPHY

SKETCHES
BY
HUT
C.D. ARTIST

ROMFORD

AND DISTRICT
BRANCH

TRADE NOTES

Oversold.—David Harvey & Co., Ltd., 107 Great Eastern Street, London, E.C.2, who recently took over distribution of Placentubex and Sevilan products report that demand for Placentubex has been so great that stocks are temporarily unavailable. Replacement stocks are expected in early February and when available orders will be dealt with in rotation.

Colour variations.—Abbott Laboratories, Ltd., Queenborough, Kent, announce that, in order to conform with the new Colouring Matter in Food Regulations, which come into force on June 26, they are changing the dyes used in some of their products. That will mean that colour variations will occur as new stock becomes available, though without change in the therapeutic effect of the product. The most notable colour changes will be in Erythrocin oral suspension and in C.V.K. granules. The granules, however, when reconstituted into solution, will be of the same colour as at present.

Discontinued.—Imperial Chemical Industries, Ltd., Pharmaceuticals division, Alderley Park, Macclesfield, Ches, are withdrawing Trilene ampoules 6 mls (5's and 25's) from sale on January 31. A. H. Robins Co., Ltd., Foundry Lane, Horsham, Sussex, deleted Robaxisal from their range on December 31, 1966. Robaxisal forte continues available.

Hold-up in Supplies.—Imperial Chemical Industries, Ltd., pharmaceuticals division, Mereside, Alderley Park, Macclesfield, Ches, announce that, because of production difficulties, they are at present unable to supply Naseptin cream. Urgent steps are being taken to resolve the production problems, and new supplies are being made available as soon as possible. The company apologise for any inconvenience caused.



FIVE BLADES FREE: The Gem safety razor that figures in premium offers by Ever-Ready Personna, London, W.C.1 (see C. & D., January 21, p. 56).

To Qualify for Special Discount.—From January 30 retail chemists' orders for Glaxo special discount parcels (minimum trade price value £25) will qualify for the extra 10 per cent. discount only if the quantity of Glaxo pharmaceuticals and antibiotics reaches or exceeds 60 per cent. of the total trade price value of the parcel. Orders may be placed with the chemist's usual wholesaler or sent direct to Glaxo Laboratories, Ltd.,

Greenford, Middlesex, Dukinfield, Ches, or Bargeeddie, Baillieston, Glasgow, naming the wholesaler through whom the goods are to be invoiced.

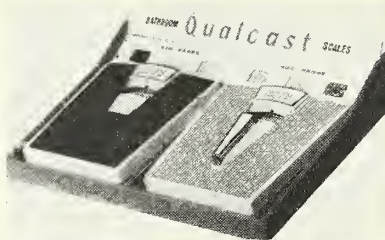
Bonus Offers

BELLAIR COSMETICS, LTD. (pharmaceutical division), Boardman Street, Oldham, Lanes. Whitecross cough mixture. Twelve invoiced as ten. Until January 31.

COSMETIQUE VIGDOR (LONDRES), LTD., 40 Lyon Street, London, N.1. Ebna Swiss precision-made pure-bristle toothbrushes. Thirteen dozen invoiced as twelve dozen (revolving display piece sent with initial gross). Introductory bonus.

MAW'S PHARMACY SUPPLIES, LTD., Aldersgate House, Barnet, Herts. Nu-flask 36-oz. size. Six at rate for twelve. Nu-Soft cotton-wool puffs. Extra 5 per cent. discount on order for 2-5 outers (each of thirty-six packs); 7½ per cent. on order for 6 or more outers. Till February 24.

QUALCAST/FLEETWAY, LTD., Charlton Road, London, N.9. Zeromatic bathroom scale. Extra 10 per cent. discount to retailers purchasing one or more



multiples of six. February 1 to May 31. Display unit available free of charge, shows both the Zeromatic 500 and 600. It may be used for counter-top or free-standing display.

SOUTHALLS (SALES), LTD., Bessemer Road, Welwyn Garden City, Herts. Nivea creme. Thirteen invoiced as twelve. Till February 24. Celtex. One slimline belt free with one case; two with two cases; four with three cases; eight with five cases. *Luxury Soft*. Two slimline belts with every case.

VITAMINS, LTD., Upper Mall, London, W.6. Bemax. 3 dozen small invoiced at 95s. 3d. instead of 100s. 6d.; 1½ dozen large invoiced at 89s. 3d. instead of 93s. 9d.; 2 doz. small plus

½ doz. large invoiced at 93s. 3d. instead of 98s. 3d.; 1 dozen small and 1 dozen large invoiced at 91s. 3d. instead of 96s. Until February 11. Orders for split packs not accepted. Bonus parcels plus extra 1 dozen or ½ dozen packs priced at bonus terms. 10-lb. drum not included in offer.

Premium Offers

LAMBERT CHEMICAL Co., Eastleigh, Hants. *Polytint*. Professional tinting brush for 2s. 6d. plus carton top from a Polytint pack. *Style Set*. Sachet of egg shampoo with every purchase of 3-oz. bottle.

LANCOME (ENGLAND), LTD., 14 Grosvenor Street, London, W.1. *Frescabel*, *Abyssale*, *Adieu Rides*. Standard-size lipstick free with purchase.

RAYETTE-FABERGE, LTD., 457 Edinburgh Avenue, Slough, Bucks. Fabergé perfumes in jeweller-designed Fabergette (refill) bottle with gold lattice top. At reduction of 13s. 6d.



Teak display unit giving details of offer, holds 2 doz. in six each — Aphrodisia, Woodhue, Tigress and Flambeau fragrance.

REMINGTON ELECTRIC SHAVES, LTD., 26 Kensington High Street, London, W.8. Remington 25 dry shaver. 30 per cent. off price to customers surrendering any make of discarded shaver in part exchange.

SOUTHALLS (SALES), LTD., Bessemer Road, Welwyn Garden City, Herts. Celtex, *Luxury Soft* or *Slimline* belts. Watches at privilege prices from January. Jewellery at privilege prices from April. Furs at privilege prices from August.

Trade Shows

MONOGRAM ELECTRIC HOUSEWARES, LTD., Gatwick Road, Manor Royal, Crawley, Sussex. **LONDON:** Hardware Trades Fair at Olympia, January 30 to February 3; Ideal Home Exhibition, March; Premium Trade Fair, New Horticultural Hall: May 23-25. **BLACKPOOL:** International Gifts Fair, February 6-10. **HARROGATE:** Electrical Development Association exhibition, February 14-16.



SPECIAL PROMOTIONS: Three premium offers until February 23 by Gillette Safety Razor Co., Great West Road, Isleworth, Middlesex, are illustrated. They are Gillette tube shave cream; 4d. off all Tube Shave Creams, including Regular, Menthol and Brushless. "Super Silver" blades; and Foamy shave cream.

NEW PRODUCTS AND PACKS

PHARMACEUTICAL SPECIALITIES

Gentamycin Quartet.—British Schering, Ltd., 225 Bath Road, Slough, Bucks, are adding four new products to their Gentacin range: Gentacin cream and ointment and Gentacin HC cream and ointment (the two latter containing hydrocortisone also). The Gentamycin cream and ointment are indicated in primary and secondary skin preparations and the HC variant in inflammatory and allergic skin diseases complicated by infections caused by gentamycin-sensitive organisms. Each is issued in a 15-gm. tube.

First Penicinate.—Bristol Laboratories, Ltd., Astronaut House, Hounslow Road, Feltham, Middlesex, have put on the market a new speciality Versapen (hetacillin), Bristol, described as "the first penicinate—a versatile and effective broad-spectrum antibiotic." For the first time, they state, the basic 6-aminopenicillanic acid has been substituted in such a way as to produce a new chemical entity—the first penicinate, in which the amino nitrogen of 6-APA is incorporated into a ring structure. Hetacillin is referred to as a penicinate whether it is in the form of a salt, such as the potassium salt, or in the form of its free acid, but more precisely "a penicinate is a 6-(5-oxo-1-imidazolidinyl) penicillanate." Claims made for the new speciality are that it is bactericidal (not simply bacteriostatic), against a wide range of Gram-negative as well as Gram-positive pathogens; that it is virtually non-toxic; that it combines an extended antibacterial spectrum with assured extended blood levels; and that it has a single dosage schedule (one or two capsules four times a day for adults and children weighing 40 kilos or more, according to severity of infection). Versapen is presented in bottles of twenty, 100 and 500 capsules each containing 250 mgm. of hetacillin activity.

OVER-THE-COUNTER MEDICINALS

A New Area of Distribution.—International Chemical Co., Ltd., 12 Chenies Street, London, W.C.1, announce that, following the successful introduction into East Anglia in June 1966 of Centrin "minifined"

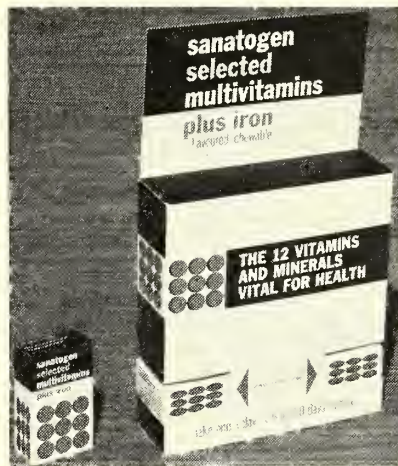


soluble analgesic tablets, the product is now available in the Blackburn area of Lancashire, and that local Press advertising commences on January 27. Centrin tablets dissolve in water to

make what is claimed "the drink that kills pain."

VITAMIN PREPARATIONS

Now with Iron.—Fisons Pharmaceuticals, Ltd., Loughborough, Leics, are giving a national launch to Sanatogen selected Multivitamins plus iron, following a successful test marketing during 1966. The tablets are basically



the same in formula as the existing Sanatogen Multivitamins, but have iron added to meet the needs of a particular section of the community. The pack is in black, white and red colouring to distinguish it from the existing Sanatogen Multivitamins range.

FOODS

A New Flavour.—Trentham Laboratories, 214 Arkwright Street, Nottingham, announce new fruit-flavoured Slim Disks which are grapefruit flavoured and packed in new carton and display outers. The original chocolate

flavoured tablet is being continued and sales are being restricted to chemists. Advertising is being increased by 50 per cent. during 1967.

COSMETICS AND TOILETRIES



Eight Products in the Box.—Elizabeth Arden, Ltd., 25 Old Bond Street, London, W.1, state that their "bride's box" contains milky liquid cleanser, skin tonic, Velve cream, Featherlight foundation, Invisible Veil powder, lipstick, miniature rouge and eye Shado (corrected note).

More Talcs in Plastics.—All fragrances of talcum powders of Goya, Ltd., 161 New Bond Street, London, W.1, are now available in new polystyrene containers following the successful autumn 1966 launch of Timeless, Frenzy and No. 5 talcs in those containers. The talcs continue to be available in the popular round tins and in aerosols. Also available is a shaving-soap refill for the Cedar Wood polystyrene shaving bowl, launched in the autumn.

A New Glass Pack.—Beecham Toiletry Division, Great West Road, Brentford, Middlesex, have repackaged Bristow's lanolin cream shampoo in



glass bottles with new label design. The shampoo is in two sizes (standard and "economy") and the launch is being supported by national television advertising. Reduced prices offers to the customer apply during the introductory promotion.

New Hair Products.—Coty (England), Ltd., 3 Stratford Place, London, W.1, have launched two new products for the hair. *L'Aimant* is a perfumed shampoo for all types of hair. Pack is a PVC bottle containing 6½ fl. oz. (sufficient for up to ten shampoos). *Imprévu* hair spray is claimed to hold all types



of hair in place. It has "its own individual and striking unit carton."

New-formula Foam Bath.—The Charles Bedeman Research Organisation (Charles Bedeman, Ltd.), 180 Queen's Road, London, S.E.15, are marketing a foam bath Aqua D'Oro, for which the claim is made that it "really foams and acts as a smoothing and softening skin emollient," it also prevents condensation (it covers the surface of the water with bubbles that act as an insulation between the water and the colder air of the bathroom and

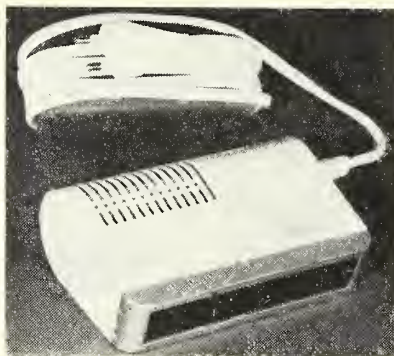
so prevent steam forming). The solution is concentrated, and should be diluted before use. Packs are a sachet and in an 8-oz. bottle (enough for 12-15 baths).

SUNDRIES

A New Hair Dryer.—A hair dryer aimed especially at the teenage market has been produced by the electrical division of Ronson Products, Ltd., Leatherhead, Surrey, and is now on the market. Called the Rio, it is a hand-

held model weighing only 13 oz. and measuring $5\frac{1}{2} \times 3\frac{1}{2} \times 1\frac{1}{2}$ in., thus fitting easily into most handbags. The 9,000 r.p.m. motor delivers 12 cu. ft. of air per minute through a wide straight grille, and at 6 in. from the grille the heat is understood to be 40°C . (72°F .) above ambient temperature. For convenience in travel the dryer operates on either 200-40 or 100-20 volts a.c. It has been given an "op-art" pack to appeal to the teenagers.

A New 36-oz. Flask.—A 36-oz Nuffalk in the National Pharmaceutical Union's series of products bears a pattern of stripes of blue and grey of varying widths. It incorporates the shock-absorbing sealed body of the smaller model, an Expanda-vac stopper and two nesting cups and is available both with and without handle in polythene. Orders are dealt with by Maw's Pharmacy Supplies, Ltd., Aldersgate House, New Barnet, Herts. Improvements have been effected in the 16-oz. model, which now has an improved Expanda-vac stopper, improved cup and new colour scheme.



Pharmaceutical Society of Northern Ireland

MONTHLY MEETING OF COUNCIL

PROPOSED inclusions in a future pharmacy Bill had been submitted to the Ministry of Home Affairs, reported MR. W. GORMAN (secretary) at the monthly meeting of the Pharmaceutical Society of Northern Council, held in Belfast on January 19. The proposals provided for a reduction in the period of apprenticeship to one year and for substituting the term "student" for "apprentice."

Among other things it was proposed to remove the £4 ceiling on retention fee and to change the 1925 Pharmacy Act provision that no one may be appointed to the office of chemist or compounder in any institution maintained by public funds unless he is a member of the Society.

Speaking about the "apprenticeship" service recognised in the 1925 Act Mr. Gorman said it recognised service in a pharmacy and in the drug department of a wholesale chemist. The latter had never been much used and its deletion was proposed. Service in a pharmacy, the pharmacy department of a hospital or such other circumstances as the Council might lay down would be recognised.

A request from the Pharmaceutical Society of Ghana for financial assistance towards the cost of its new headquarters premises in Accra, being built at an estimated cost in the region of £50,000 was turned down on the ground that all available assets of Society had been used in making additions to its own premises.

The Council agreed to restore to the Register the name of Mrs. Muriel E. Robinson, Hill Farm, Ballymacashan, Killinchy, co. Down.

An application by Davidson & Hardy (Laboratory Supplies, Ltd.), Antrim Road, Belfast, for the use of the Society's lecture hall on February 7 was granted. The lecture "Regeneration in Situ Versus Cartridge Exchange," is being given by Mr. Raymond Glendenning (Elga Products, Ltd.).

After hearing a report from the House Committee on heating the Society's Council Room, the secretary was directed to get an estimate of the cost of installing a new heating system.

The Council approved the registration as an apprentice of Mr. A. E. Parker, Belfast, who was stated to have passed his Senior Certificate examination in 1961.

Mr. M. McGread, 23 John Street, Omagh, was co-opted a member of Council to replace Mr. N. C. Cooper, who

has resigned following his appointment as pharmaceutical adviser to the Ministry of Health and Social Services.

A special meeting of the Council has been called for February 3, to discuss a report from Future of Pharmacy Committee. Copies of the report had been circulated to the members, said THE PRESIDENT but the subject was too big to be dealt with at the ordinary monthly meeting.

THE SECRETARY reported that he had been requested to circulate members of the Society about the sale of Romilar tablets. Young people, he said, were trying to purchase the tablets, which contained a Schedule 1 poison, from pharmacies in various parts of Northern Ireland. He had heard from one doctor that a patient admitted to hospital had been getting supplies. A member confirmed that there was quite a demand for the tablets among young persons in Belfast; he had been asked for them on three occasions. Mr. Gorman was given permission to write to pharmacists drawing their attention to the regulations governing the sale of Romilar tablets.

MR. S. C. WELLWOOD referred to an advertisement that was being screened on Ulster Television for Antussin cough mixture. Young people, he said, appeared to be getting information about the product, which contained dextromethorphan. He believed that some attention should be drawn to it. The mixture was probably safe enough, but he thought the television company should be told that it contained a fairly potent poison. It was decided to refer the advertisement to the Society's Ethical Committee.

MR. J. KERR said the question of a one week full-time refresher course for pharmacists had been discussed with Dr. Shaw, and it was hoped that such a course would be provided in the pharmacy department of Belfast College of Technology in September.

Members present at the Council meeting were the president (Mr. A. T. Hardy), Messrs. N. A. J. Anderson; W. H. Boyd; H. G. Campbell; R. J. Davidson; H. W. Gamble; J. Gordon; W. T. Hunter; J. Kerr; G. E. McIlhagger; D. Moore; J. Paul; A. Templeton and J. C. Wellwood. Mr. R. M. Watson (Druggists' representative); Professor O. L. Wade (department of therapeutics and pharmacology, Institute of Clinical Science, Belfast) and Dr. R. G. R. Bacon (Queen's University) were also present.

Cumulative price changes

AMENDING C & D
QUARTERLY PRICE LIST
FOR DECEMBER 1966

3-Hands (1227 THP) existing entry										3-Hands (1227 THP)										popular family hp										22 2 6 1 3																																																																																																																																																																																																																																																																																																																																																																																																																																																							
disinfectant										medium 15 3 — 1 8										giant 21 0 — 2 4										Allison (40 Allison) starch-reduced rolls white 15 not 10 brown 15 not 10										Alloferin (1074 Roche) ampoules 10mgm/2mils 6 10 8ea — 16 0 50 78 0ea — 117 0										Ayrton (78 A5 & Co) A.P.C. plus tablets 14 0 3 10 2 6										Bactylan (1087 Roussel) granules 350gm 18 3ea — 27 4										Bades (1169 G5 & 5) existing entry										Bades (338 Cussons) bath additive tube 1-bath 13 0 3 7 2 0 5-bath 52 0 14 3 7 9 10-bath 99 0 27 3 14 9 25-bath 19 2ea 5 3ea 34 2 75-bath 51 0ea 14 0ea 91 3										Bain d'Or (597 HCL) perfume 10cc 208 0 55 10 — soap lemons 2 1/2oz 4 5 3 10 — Splash Cologne 100cc 121 4 32 6 —										Band-Aid (672 Johnsons) Sheer plasters 21 3 — 2 6										Banminth (969 Pfizer) solution (vet.) 1pt 31 6ea — 42 0 1gall 218 7ea — 291 6 tablets (vet.) 20 18 9ea — 25 0										Beflavit (1074 Roche) ampoules 50 — — 1 0 tablets 3mgm 500 — — 2 6										Bell's (108 Bell) existing entry										Bell's (108 Bell) per remedies blood salts 8 9 — 1 0 21 3 — 2 6 budgie tonic 11 0 3 0 1 6 canker lotion 18 0 4 1 1/2 2 6 powder 18 0 4 1 1/2 2 6 cough tablets (dogs or cats) 12 9 3 6 1 9										diarrhoea tablets 14 6 4 0 2 0										Doomdust 11 0 — 1 3										eczema ointment 18 0 4 1 1/2 2 6										eye lotion 18 0 4 1 1/2 2 6										ointment 18 0 4 1 1/2 2 6										gastritis tablets 12 9 3 6 1 9										Katnips powder 14 6 4 0 2 0										tablets 7 9 2 1 1/2 1 1										17 6 4 10 2 6										laxative tablets 9 9 2 8 1 4										Mange-Pak 21 0 5 9 2 9										Min-O-Vit B 22 0 — 2 9										36 0 — 4 6										11 0 3 0 1 6										18 0 4 1 1/2 2 6										Moulter pet ointment round worm tablets (dogs or cats) 9 0 — 1 0										sedative tablets 14 6 4 0 2 0										shampoo liquid sachet 5 0 1 4 1/2 10										bottle 14 6 4 0 2 0										29 0 8 0 4 0										Snowcoat (dogs or cats) 17 6 4 10 2 6										worm capsules (dogs) 14 6 4 0 2 0										tablets (dogs) 16 0 4 5 2 3										(cats) 14 6 4 0 2 0										worming oil 14 6 4 0 2 0 23 6 6 5 1/2 3 3										Benadon (1074 Roche) ampoules 50 — — 1 0										Benadryl (938 PD) parenteral (vet.) 10mils — — 1 0										Benemid (837 MSD) tablets 100 40 10ea — 61 3 500 196 4ea — 294 6										Benerva (1074 Roche) tablets 25mgm 25 — — 1 0 50mgm 25 — — 1 0										Benzodent (1489 Cottrell)†										Berkmycen (117 BPL) T5 tablets 250mgm 16 5 11ea — 8 10 100 32 0ea — 48 0 1000 293 9ea — 440 7										Betnelan (518 Glaxo) T5 tablets 0.5mgm 100 17 0ea — 22 8 tablets 0.5mgm 30 — — 1 0									
Actual (97 Bayer) tablets 24 24 0 — 3 0 12 — — — —										Actified (208 BW) compound linctus†7DDI 125mils 48 0 — 6 0 500mils 176 0 — 22 0 125mils 48 0 — 6 0 500mils 176 0 — 22 0 2 litres 55 8ea — 83 6										compound linctus 4oz & 20oz — — — — syrup 4oz & 20oz — — — —										Actol (1388 Durazone) Acudex (1530 Fisons)										Adcortyl-A (1176 Squibb) ophthalmic ointment										Adcortyl-AQ (1176 Squibb) spray										Adcortyl-EG (1176 Squibb) cream 50gm										Airbron (179 BDH) ampoules 2mils 25 84 0ea 23 1ea — vial 10mils 3 49 10ea 13 8 1/2ea — 30mils 3 142 0ea 39 0 1/2ea —										Airwick (23 Airwick) Lilac Time 29 3 — 3 3 "all-day" Springtime bottle — — — — refill — — — — Floral Mist — — — —										Akineton (708 Knoll) existing entry										Akineton (708 Knoll) ampoules 6 48 0 — 5 4 30 17 0ea — 22 8 tablets 20 42 0 — 4 8 50 85 0 — 9 5 200 23 6ea — 31 4										Alberto-Culver (1437 ACC) existing entry										Alberto-Culver (1437 ACC) Dermafresh hand lotion 85cc 27 0 7 1 4 0 Get Set gel 165gm 34 3 8 9 1/2 4 11 hair spray 140gm 32 9 8 7 4 7 275gm 46 10 11 7 6 11 shampoo 200cc 23 5 6 2 3 6										New Dawn hair colour† 54cc 67 8 17 8 9 11										VO5 hairdressing (regular and blue) 42gm 40 3 10 6 5 10 hairspray 130gm 40 9 10 8 6 0 220gm 67 8 17 8 9 11 jumbo size 100 0 26 1 1/2 14 9 (spray for grey) 176gm 67 8 17 8 9 11 shampoo sachet 6 0 1 7 10 1/2 57cc 20 2 5 3 2 11 1/2 100cc 27 0 7 1 4 0 200cc 51 10 13 6 1/2 7 8										Aldactone-A (1121 Searle) tablets 25 mgm 40 26 6ea 39 9 30 — — — —										Alexa (599 Henleys) (distributors 1545 Vestric) plastic occlusive dressings gloves large 25 OD/15 35 0 4 0 4 8 1/2 100 OD/15 123 0 13 7 17 1 shaped foot OD/26 112 6 12 4 1/2 13 7										Algispray (238 CL) Algispray (1546 Sheranel) spray balm aerosol 48 0 13 2 1/2 6 11										Alkeran (208 BW) †1s4A tablets 2mgm 25 76 0 — 9 6 5mgm 25 132 0 — 16 6 tablets 2mgm & 5mgm 100's — — — —										All Fours (1068 Roberts) †DDI										Amalief (42 Amalie) eau de Cologne with atomiser 3oz — — 60 0 perfume 1/2oz — — 25 0 6cc — — 42 0 1/2oz — — 99 6 1oz — — 183 2										Island Man after shave 4oz — — 45 0										Amplex (67 Ashe) foot fresh 48 0 12 11 6 10										Ancufen (179 BDH) †s4B tablets 50 22 9ea — 34 1 1/2										Andre Philippe (48 AP) after shave lotion 103 33 0 9 1 4 11 bubble bath candlestick 7 33 0 9 1 4 11										Angel Face (256 CPL) Brush Alive 53 9 14 10 —										Annovax (208 BW) VPO vaccine (vet.) 50mils 17 7 1/2ea — 23 6 250mils 82 6ea — 110 0										Antabuse (1582 Albion) existing entry										Antabuse (1582 Albion) †1s4A tablets 0.5gm 25 44 0 — 5 6 50 76 0 — 9 6 500 58 0ea — 87 0										Antas (1582 Albion) existing entry										Antas (1582 Albion)† tablets 50 20 0 5 6 2 11 100 36 0 10 0 5 4 250 80 0 — 10 0 1000 264 0 — 33 0										Antepar (208 BW) elixir 125mils 62 0 — 7 0 500mils 192 0 — 24 9 4oz & 20oz — — — —										Antussin (1239 Tobal) † double strength 2oz 40 6 — 4 6 4oz 67 6 — 7 6 2oz 36 0 — 4 0										children's chewable capsules 24 36 0 — 4 0 20 30 0 — 3 4										Aqua D'Oro (102 CB) foam bath sachet 20 0 5 6 1 0 (3doz) (3doz) 19 10 10 6 bottle 8oz 72 0										Aqua Velva (1113 S & B) after shave lotion 27 4 7 6 3 8 old size 22 9 6 3 3 1										Arcofac (61 APC) Armonoeostrol (61 APC) all packs										Arpege (730 Lanvin) perfume 1/2oz — — 51 6 1/2oz — — 77 0 handbag spray refill — — 62 0 46 0 toilet water 2oz — — 39 0 veil of Arpege 3oz — — 39 3 6oz — — 66 0										Artane (746 Lederle) †s4B tablets 5mgm 1000 113 4ea — 170 0										Asmasol (1582 Albion) †1s4A inhalant solution 60mils 96 0 — 12 0										Aspellin (1023 Radiol) aspirin spirit liniment 16oz 135 0 — 17 0										Astral (509 Gibbs) cream .small 14 3 3 11 1 11																																																											

[illegible]

Elix. phenobarbital (745 Legat) †s1s4A										D Galactomin (1249 Truford) existing entry										Honeyfruit (175 BCP)									
500mils 15 6ea — —										I Galactomin (1249 Truford)										health food 7oz 45 0 — 4 9									
Elix. tonic infans (745 Legat)										formula 17 14oz 100 0 — 10 6										16oz 82 6 — 8 9									
500mils 4 11ea — —										31b 314 6 — 32 9										D Hormosed (745 Legat)									
Elizabeth Arden (60 Arden)										formula 18 reduced 14oz 125 6 — 13 0										I Hormosed (745 Legat) †s4B									
bride's box — — 85 0										formula 19 fructose 16oz 389 0 — 40 6										500mils 7 0ea — —									
eyelashes extra thick 399.00 — — 31 3										Gantrisin (1074 Roche)										Hudson (1343 DVV)									
silverings — — 10 6										ampoules 25 — — — —										flash cube re-usable 61 9½ 10 2½									
Elnett (525 Golden)										Gardenal (971 P5MB) †s1s4A										(2 doz) (2 doz) — —									
Satin aerosol 4oz 37 6 10 4 5 6										tablets 60mgm 100 20 0 — 2 5										Hydrenox (147 Boots) †s4B									
for greasy hair 10oz 71 0 19 6 10 6										1000 106 0 — 13 3										tablets 50mgm 100 16 9ea — 22 4									
Embequin (971 P5MB)										sodium powder 25gm 58 0 — 7 3										500 76 6ea — 102 0									
tablets 100 & 500										tablets 86 mgm — — — —										Hydrenox-M (147 Boots) †s4B									
Entair (179 BDH)										Gargon (1176 5quibb) T5VPO										tablets 25mgm 100 10 0ea — 13 4									
expectorant 500mils 10 0ea 2 9ea 17 9										(vet) 6cc 30 0 — 3 9										500 42 0ea — 56 0									
Ephynal (1074 Roche)										Gay-Jee (927 OL)										Hydro-Adreson (917 Organon)									
tablets 3mgm 250										pine disinfectant 16oz 18 0 — 2 1										cream 0.5% 5gm & 50gm									
10mgm 25										160oz 110 0 — 11 0										1.0% 5gm & 50gm									
Equanil L.A. (1352 Wyeth)										Genticin (187 B5) T5										2.5% 50gm									
Equizole V (837 MSD)										injection vial 2 mils 6 141 0ea — —										lotion 0.5% 20mils									
Equizole V (837 MSD) VPO										cream 25 576 6ea — —										1.0% 20mils									
powder (vet.) 30gm 65 3 — 7 3										ointment 15gm 8 6ea — —										Hydrocortisone (917 Organon)									
Erasmic (509 Gibbs)										ointment 15gm 10 7ea — —										ointment 0.5% 5gm & 50gm									
shaving stick 18 10 5 2 2 7										Gerber (200 B&P)										1.0% 5 gm & 50gm									
refill 11 4 3 1½ 1 6										junior foods										2.5% 5gm & 50gm									
shaving cream tube 20 11 5 9 2 10										lamb dinner, beef										Ibcol (671 Jeyes)									
jar 30 4 8 4 4 1										dinner, veal dinner 4½oz 22 10 — 1 2										disinfectant 4oz									
Superfoam aerosol 34 1 9 4½ 4 7										strained foods										toilet packet									
Ergoapio (261 Christy) †s4B										lamb dinner, beef										Icilma (509 Gibbs)									
Esoban (1166 Southon)										dinner, veal dinner 4½oz 22 10 — 1 2										vanishing cream 8 6 2 4 1 2									
with ichthyol										4½oz 22 10 (2 doz) — 1 2										15 10 4 4½ 2 3									
4oz and 80oz										Germaine Monteil (1486 GM)										Ilford (645 Ilford)									
E.S.T.P. (1457 PP Ltd.)										Colour Controllers — — 15 2										Colourprint 20exp. 12 10ea 1 5ea 18 6									
ointment 4oz										Gibbs (509 Gibbs)										Rapid 9 4ea 1 1ea 13 6									
Etophylate (1531 Delandale)										dentifrice 10 7 2 11 1 5										Colorslide 20exp. 12 1½ea 1 4ea 17 6									
(distributors 1077 Rona)										fluoride tooth-paste 17 9 4 10½ 2 4										Colorslide Super 8exp. 8 4ea 1 1ea 12 0									
Etophylate P.P. (1531 Delandale)										26 6 7 3½ 3 7										20exp. 20 1ea 1 6ea 19 11									
(distributors 1077 Rona)										35 11 9 10½ 4 10										36exp. 13 1ea 2 3ea 29 0									
Eucryl (430 Eucryl)										Gillette (514 Gillette)										Rapid 11 9ea 1 4ea 17 0									
denture powder										razor Techmatic — — 42 0										Colorcine '25' 16 5ea 1 10ea 23 9									
large 14 8 4 0½ 2 1										replaceable — — 8 11										holiday pack 49 4ea 5 6ea 71 3									
Eutonyl (2 Abbott) †s4B										cartridge — — — —										Ilfochrome 8mm '100' 55 4½ea 6 2ea 80 0									
Film tabs 25mgm										D Glintel (1335 Wigglesworth) existing entry										D Ilidar (1074 Roche)									
100 52 10ea — 79 3										I Glintel (1335 Wigglesworth)										Imprevu (301 Coty)									
500 251 0ea — 376 6										lotion 10 9 2 11½ 2 0										perfume cream sachet 264-09 120 6 32 4 17 9									
1000 487 0ea — 730 6										pastilles 16 0 — 2 6										hair spray 940-09 105 3 28 3 15 6									
Eutonyl-Ten (2 Abbott) †s4B										toilet lanoline tube 10 0 2 9 1 9										Influvac (324 Crookes)									
Film tabs 10mgm										Glycolgne (1335 Wigglesworth)										apoules 1ml 1 10 0ea — 13 4									
100 26 0ea — 39 0										hand jelly 11 3 3 1 2 3										In Love (1376 Hartnell)									
500 123 6ea — 185 3										D Glyped (649 ICI)										(distributors 544 Grossmith)									
1000 239 7ea — 359 4										cream — — — —										perfume HL4½ 550 0 151 3 83 8									
Eve Reve (Rigaud) (47 Anestan)										I Goddess (280 CP) 5 pack minimum order										Inter-Dens (1457 PP Ltd.)									
perfume standard										hairspray standard 37 6 10 3 5 6										mirror pack									
½oz 9 9ea 2 8ea 19 9										large 47 8 13 0 7 0										JETset (1391 Swiffax)									
1oz 25 0ea 6 10ea 50 6										sachet 17 9 4 10 10										electrically heated									
2oz 36 0ea 9 11ea 73 0										shampoo (3 doz) (3 doz) 3 7 1 10½										hair roller kit 142 7ea 38 2ea 252 0									
1oz 50 0ea 13 9ea 101 3										bottle 21 6 5 10 3 0½										Jeyes (671 Jeyes)									
special de-luxe										Goulds (1335 Wigglesworth)										Baby Soft packet 7 11 — 10½									
½oz 47 6ea 13 1ea 96 3										baby powder 11 3 3 1 2 0										double 15 0 — 1 8									
1oz 66 0ea 18 2ea 133 9										Goya (532 Goya)										D sulphur candle — — — —									
super de-luxe ½oz 156 0ea 43 0ea 316 0										Cedar Wood										Jeypine (671 Jeyes)									
spray ½oz 18 0ea 5 0ea 36 6										shampoo 41 10 11 2½ 2 6										disinfectant 4oz									
refill ½oz 12 0ea 3 4ea 24 4										Grossmith's (544 Grossmith)										D Jordan (1372 CCL)									
toilet water standard										talcum 807 26 6 7 3½ 4 1										Jordan (173 Britanol)									
2oz 19 0ea 5 3ea 38 6										I Hair-Do (556 HDC)										toothbrushes adult									
4oz 30 0ea 8 3ea 60 9										continental bubble bath 20 0 5 6 2 11										junior 18 0 — 3 3									
8oz 54 0ea 14 10ea 109 4										hand cleansing milk 20 0 5 6 2 11										Juvinate (147 Boots)									
32oz 260 0ea 71 6ea 526 6										hand cream 20 0 5 6 2 11										syrup 4oz 22 0 — 2 9									
spray 3oz 39 0ea 10 9ea 79 0										shampoo 20 0 5 6 2 11										8oz 40 0 — 5 0									
refill 3oz 23 6ea 6 5ea 47 6										egg and lanolin sachet 3 4 11 6										20 0 5 6 3 0									
Exolan (1454 Dermal)										340cc 20 0 5 6 2 11										Kay's (683 Kay)									
cream 50gm 17 6ea 4 10ea —										medicated sachet 3 4 11 6										(distributors 834 MWL)									
Eylure (443 Eylure)										340cc 20 0 5 6 2 11										linseed compound									
Three-to-get Ready 72 6 19 10 10 8										D Haliverol (938 PD)										2oz 14 6 4 0 1 11									
Farina, Johann Maria (529 Gorney)										50 mils — — — —										6oz 29 4 8 1 3 11									
Red Crest Cologne										Hard as Nails (43 Amropa)										Keatings (430 Eucryl)									
50055 65 2 17 11 9 8										30 0 8 6 4 9										large 36 0 — 4 0									
50200 216 0 59 5 32 9										Harmony (412 Elida)										"De Luxe" 63 4 — 7 11									
50119 180 0 49 6 26 8										hair colour tube 22 6 6 2½ 3 4										"Classic" 44 0 — 5 6									
(Rosoli)										Hartnell (1376 Hartnell)										"Wessler" 60 0 — 7 6									
50140 & 50180 — — — —										(distributors 544 Grossmith)										ex. hard 63 4 — 7 11									
ellows (451 F&J)										eye shadow 37 6 10 3½ 5 9										"Park Lane" ex. hard 31 4 — 3 11									
ellows (369 DL)										lipstick refill 34 0 8 6 5 2										"Contour" 31 4 — 3 11									
Flona (164 Brandt)										rouge cream 23 6 6 5½ 3 7										"Harley Street" 26 0 — 3 3									
(distributors 261 Christy)										Havapen (1352 Wyeth) T5										"Olympic" nylon 22 0 — 2 9									
Fisherman's Friend (771 LCPL)										tablets 100 41 8ea — 55 7										"KB42" badger 52 0 — 6 6									
rubbing ointment										Hemosol (107 BH & L)										Kinidin Durules (68 AH)									
extra strong 36 0 9 10 5 0										liquid 6oz 68 0 — 8 6										tablets 30 26 6ea — 39 9									
Flagyl (971 P5MB)										syringe 20 0 — 2 6										100 80 7ea — 120 11									
tablets 200mgm										D Hepatex-T (394 DF)										Kleenex (702 KC)									
250 151 8ea — 227 6										Heptonal (1531 Delandale)										kitchen towels									
Four Arrows (219 Calvert)										(distributors 1077 Rona)										twin roll 44 4 — —									
Four Arrows (331 C of C)										D Herplex (1369 JR)										(1½ doz.) — —									
Frador (107BH&L)										I Herplex (1021 Quants) 36 0 — 1 10										Kodak (711 Kodak)									
(distributors 451 F & J)										(3doz) — — — —										39 11ea 10 6ea 71 11									
17 8 4 4½ 2 7										Hexaphen (295 CM & R)										Instamatic camera									
Fruligar (333 Cupal)										(vet.) 1qt. 16 10½ea — 22 6										outfit "25" 56 6ea 14 3ea 98 3									
garlic cough mixture 16 6 4 1 2 6										Histadyl E. C. (413 Lilly) †s7 DDI										projectors									
Frucidin H (747 Leo) T5										syrup 80oz 36 0ea 9 11ea 63 11										Instamatic M70-L 845 0ea — 1300									
ointment 10gm 6 6ea — 8 8																													
25gm 14 0ea — 18 8																													
Fujica (565 Hanimex)																													
cameras cine																													
Z2 — — 1799 6																													
Gullers (1246 TP & T)																													
Gullers (3 Abel)																													
Gahns (900 Norton)																													
Swedish pine needle																													
foam bath sachet 10 10 3 0 1 7½																													
4oz 78 0 21 5½ 11 8																													
8oz 150 0 41 3 22 0½																													
soap 32 6 8 11 4 10																													

	old models	180-L	975	0ea	—	1500	0
D	movie film Ektachrome II						
	Labiton (718 LAB)						
	approx. 8 oz	51	0				
	approx. 26 oz	150	0	14	2	6	11
				42	0	20	3
	Lactocalamine (324 Crookes)						
	cream	50gm	28	0			
D		28gm	—		7	8½	4 2
	potassium bicarbonate						
	300mgm	1000	38	5ea	—	—	—
	500mgm	1000	43	2ea	—	—	—
	1gm	1000	84	0ea	—	—	—
	L'Aiment (301 Coty)						
	perfume cream sachet	264-20	106	9	28	8	15 9
	shampoo perfumed	920-20	64	6	17	3	9 6
	Lanvin (730 Lanvin)						
	coffret (3 bottles)	—	—	—	—	138	0
	(4 bottles)	—	—	—	—	138	0
	Laroxyl (1074 Roche)						
D	ampoules						
D	Layla (1372 CCL)						
I	Layla (1000 PPL)						
	Lectro-caps (1429 TL)						
	lithium carbonate						
	300mgm	1000	45	7ea	—	—	—
	potassium chloride						
	500mgm	1000	40	10ea	—	—	—
	1gm	1000	74	5ea	—	—	—
	sodium bicarbonate						
	500mgm	1000	36	0ea	—	—	—
	850mgm	1000	54	0ea	—	—	—
	1gm	1000	60	0ea	—	—	—
	2gm	1000	90	0ea	—	—	—
	sodium bicarbonate						
	500mgm & potas-						
	sium bicarbonate						
	500mgm	1000	81	7ea	—	—	—
	sodium fluoride						
	10mgm	1000	36	0ea	—	—	—
	sodium chloride						
	250 mgm	1000	37	2ea	—	—	—
	500mgm	1000	40	10ea	—	—	—
	750mgm	1000	48	0ea	—	—	—
	1gm	1000	74	5ea	—	—	—
	1-25gm	1000	90	7ea	—	—	—
	1-5gm	1000	93	0ea	—	—	—
	Ledermycin (746 Lederle) T5						
	capsules 300g.						
		16	22	10ea	—	34	3
		100	136	6ea	—	204	9
		500	659	0ea	—	988	6
	Leicher (749 Leichner)						
	professional						
	make-up kit	52	0ea	14	3½ea	92	6
	Less (528MG)						
	toothpaste	16	7	4	7	2	3
	Leucodin (819 McY)						
	ointment	1oz	14	9ea	4	0½ea	23 11
D	Levenor (1530 Fisons)						
D	Lidothesin (1341 Willows) existing entry						
I	Lidothesin (1341 Willows)						
	plain or with						
	adrenaline						
	1—100,000 or						
	1—200,000						
	injection vial						
	0.5%, 1% & 2%						
	20mils	6	6	9ea	—	9	0
	50mils	6	11	9ea	—	15	8
	250mils	12	4ea	—	—	16	6
	ampoules						
	2mils	100	27	9ea	—	37	0
	5mils	50	27	9ea	—	37	0
	10mils	25	27	9ea	—	37	0
	20mils	6	17	8ea	—	23	8
	25mils	6	17	8ea	—	23	8
	cartridges						
	2mils	100	22	11ea	—	30	6
	topical 4% 25mils	3	7ea	—	—	5	5
	gel 1% antiseptic						
	15mils	30	0	—	—	3	9
	2% antiseptic						
	15mils	30	0	—	—	3	9
	Limmits (1552 UL)						
	plain chocolate meal	20	3	3	4½	2	6½
	Lipostabil (894 Nicholas)						
	capsules	60	136	0	37	5	20 1
	Locabiotol (1123 5LL)						
	(distributors 1556 Farillon)						
	nasal spray nebuliser						
	15mils	7	0ea	—	—	10	6
	pressurised aerosol						
	see L.P. Aerosol						
	Locasol (1249 Trufood)						
	14oz	100	2	—	—	10	6
	3lb 31l	0	—	—	—	32	9
	Locorten-Vioform (262 CIBA) T5						
	eardrops	7-5mils	116	0	—	14	6
D	Locofen (1310 WW) tablets 25mgm						
	Lustre Dent (280 CP) 5 pack minimum order						
	standard	33	2	9	0	2	3½
	(2 doz)	(2 doz)	(2 doz)				
	large	24	0	6	7	3	4
	(1 doz)	(1 doz)	(1 doz)				
	Lynoral (917 Organon)						
D	tablets 0-01mgm 25						
D	0-02mgm 25						
D	0-05mgm 25						
D	0-1mgm 25						

		1-0mgm 25							
D	Lyovac Cosmegen (837 M5D) T5	0-5mgm	11	0ea	—	—	—	17	9
—	Macleans (105 BTD)	toothbrushes	16	1	—	—	—	1	11
	Mavala (664 J5 & C)	cuticle cream	120	0	33	0	—	18	0
	scientific hardener	discovery pack	33	8	9	3	—	5	0
	Medihaler-bron (1061)	Riker†	10	0ea	—	—	—	15	0
D	200 dose	—	—	—	—	—	—	—	—
	300 dose	—	—	—	—	—	—	—	—
	Mellow Blossoms (280)	CP1 5 pack	—	—	—	—	—	—	—
	toilet soap	(4)	42	8	11	7	—	1	11½
		(1 gross)	—	—	—	—	—	—	—
	Melody (412 Elida)	hair colourant	45	1	12	5	—	6	8
D	Menformon (917 Organon)	tablets 0-1mgm 25, 100 & 500	—	—	—	—	—	—	—
D	0-3mgm 25	—	—	—	—	—	—	—	—
D	1-0mgm 25	—	—	—	—	—	—	—	—
D	5-0mgm 25	—	—	—	—	—	—	—	—
	Mennen (525 Golden)	Cologne	59	0	16	3	—	8	9
	Mentasol (509 Gibbs)	toothpaste	—	—	—	—	—	—	—
	standard	17	9	4	10½	—	—	2	4
	large	25	2	6	11	—	—	3	5
	Merveilleuse (Rigaud)	(47 Anestan)	—	—	—	—	—	—	—
	perfumed Cologne	—	—	—	—	—	—	—	—
	standard	4oz	26	6ea	7	4½ea	—	53	9
		8oz	43	6ea	11	11ea	—	88	0
	spray	3oz	38	6ea	10	7ea	—	78	0
	refill	3oz	23	6ea	6	5ea	—	47	6
	Mestison (1074 Roche)	ampoules 50	—	—	—	—	—	—	—
D	Methyltestosterone (917 Organon)	Sublings 5mgm 25, 10mgm 25, 50mgm 25	—	—	—	—	—	—	—
D	50mgm 25	—	—	—	—	—	—	—	—
D	50mgm 25	—	—	—	—	—	—	—	—
D	Milontin (938 PD)	Kapseals 0-25gm 500	—	—	—	—	—	—	—
D	Minafen (1249 Trufood)	16oz 301 0	—	—	—	—	—	33	6
		31b 885 0	—	—	—	—	—	98	3
	Minard's (104 BP)	massage	26	9	6	9½	—	3	6
	Minolta (667 JCL)	camera 16MG	—	—	—	—	—	703	1
	Miranda (817 MP5)	camera "FVT"	—	—	—	—	—	1599	9
	case	—	—	—	—	—	—	86	3
	Sensorox	—	—	—	—	—	—	1999	6
	case	—	—	—	—	—	—	135	6
	Mogadon (1074 Roche)	syrup	—	—	—	—	—	—	—
D	Monica Smart (856 M5C) existing entry	—	—	—	—	—	—	—	—
D	Monica Smart (856 M5C)	deodorant (roll ball)	28	4	7	8	—	4	6
I		eyebrow pencil	9	5	2	7	1	1	6
		face powder	15	8	4	4	2	6	0
		lipstick	31	5	8	7	5	0	0
		skintone foundation	70	8	19	4	10	0	0
		talcum	33	0	9	0	5	6	0
	Morny (862 Morny)	beauty bath foam	—	—	—	—	—	13	6
	Mortha (1305 WB) †sIDD	ampoules No. 1	—	—	—	—	—	—	—
		100 84 0ea	—	—	—	—	—	126	0
	Muguet des Bois (301 Coty)	perfume cream sachet	264-60	106	9	28	8	15	9
	Mum (172 BMCL)	aerosol spray 3oz	47	3	12	4	—	6	5
I	Mydrilate (1305 WB)	solution 0-5%	—	—	—	—	—	—	—
		12x5mils	44	0ea	—	—	—	66	0
		1%	—	—	—	—	—	—	—
		12x5mils	48	0ea	—	—	—	72	0
	My Sin (730 Lanvin)	perfume ½oz	—	—	—	—	—	46	0
		½oz	—	—	—	—	—	63	0
		handbag spray	—	—	—	—	—	55	0
		refill	—	—	—	—	—	39	6
		toilet water 2oz	—	—	—	—	—	32	0
	Naclex (518 Glaxo) †s4B	tablets 50mgm	100	16	9ea	—	—	22	4
		500	76	6ea	—	—	—	102	0
D	Neo-Hepatex (394 DF)	—	—	—	—	—	—	—	—
D	Neo-Hombreol (917 Organon)	ampoules 25mgm 3	—	—	—	—	—	—	—
D		50mgm 3	—	—	—	—	—	—	—
D		100mgm 3	—	—	—	—	—	—	—
	Neosporin (208 BW) T5	eye drops 5mils	60	0	—	—	—	7	6
D	Nicotinamide (1074 Roche) tablets	—	—	—	—	—	—	—	—
D	Nicotinic acid (1074 Roche) tablets	—	—	—	—	—	—	—	—
D	Nidar (61 APC)	—	—	—	—	—	—	—	—
D	Nitoman (1074 Roche)	—	—	—	—	—	—	—	—
D	Noctenar (61 APC)	—	—	—	—	—	—	—	—
D	Noludar (1074 Roche)	tablets 50mgm 30 & 500	—	—	—	—	—	—	—
	Novotrid (971 P5MB) †s4B	suspension 125mils	60	0	—	—	—	7	6
		1 litre	35	10ea	—	—	—	53	9
		tablets 0-5gm	50	6	0	—	—	8	3
		500	41	8ea	—	—	—	62	6
	Nu-seals (413 Lilly)	P.A.S. 0-5gm 1 000	—	—	—	—	—	—	—
D	Nu-soft (810 Maw)	cotton wool puffs	36	0	—	—	—	1	4
		(3 doz)	—	—	—	—	—	—	—

	Nutrilite (509 Gibbs)	19	1	5	3	
		31	4	8	7½	4
D	Odol (314 Cranbux) existing entry					
I	Odol (314 Cranbux)					
	(distributors 528 GM)					
	mouthwash	45cc	27	9	7	8
		85cc	48	6	13	4
	toothpaste	61gm	18	2	4	11
		107mg	32	8	8	11
	Old Spice (1131 Shulton)					
	body talcum lime	3540	78	6	21	7
	deodorant aerosol lime	3576	84	0	22	6
D	Olympus (1343 DW) existing entry					
I	Olympus (1343 DW)					
	cameras					
	35 LE	0097	—	—	—	9907
	35 LC	0115	—	—	—	7907
	case	0106	—	—	—	747
	Pen F. f2-8	0093	—	—	—	9908
	f1-8	0005	—	—	—	11907
	f1-5	0083	—	—	—	1375
	Pen FT. f1-4	0031	—	—	—	15007
	f1-4	0032	—	—	—	1777
	f1-2	0033	—	—	—	2176
	soft case	0080	—	—	—	74
	hard case	0114	—	—	—	107
	Quickmatic					
	f3-5	0098	—	—	—	357
	f2-8	0091	—	—	—	420
	EEM	0017	—	—	—	590
	pouch case	0111	—	—	—	35
	Omnipon (1074 Roche)					
D	tablets hypod. 25 & 250					
D	oral 20					
D	Tubunic syringe					
	Optone (690 Keldon)					
	eye drops	large	37	5	10	1
D	Oradexon (917 Organon)					
D	tablets 0.5mgm 30					
	0.75mgm 30					
	Ortho-Novin (22 Ortho)†s48					
D	calender pack	21	70	0	—	8
		20	—	—	—	—
	Otrivine-Antistin (262 CIBA)					
	eye drops	10mils	60	0	—	7
D	Ovestin (917 Organon)					
	injection 1mgm 2					
	Oxymycin (1515 CD) T5					
	tablets/capsules	100	29	0ea	—	—
		1000	285	0ea	—	—
	Ozoline (927 OL)					
	DDT spray	32oz	46	0	—	5
		1gal	168	0	—	21
	aerosol	12oz	46	0	—	5
D	aerosol	6oz	—	—	—	—
D	sprayers	—	—	—	—	—
I	Ozolo (927 OL)					
D	healthy pine	160oz	125	0	—	12
D		6oz	—	—	—	—
I	Ozonol (927 OL) existing entry					
I	Ozonol (927 OL)					
	air purifiers	57	0	3	0	7
	refill	30	0	—	—	3
	channel hygiene					
	block	9	0	—	—	1
	pine air	56	0	2	5	6
	refill	34	0	—	—	4
	Ozzo (927 OL)					
I	air fresh aerosol					
	8oz	28	0	—	—	3
	12oz	44	0	—	—	5
	telephone hygiene					
	4oz	54	0	—	—	6
D	air fresh aerosol					
	6oz	—	—	—	—	—
	Palmolive (280 CP) 5 pack minimum order					
	after shave lotion	17	7	4	10	4
		(½ doz)	(½ doz)	(½ doz.)	(½ doz.)	(½ doz.)
	pre-electric shave	17	7	4	10	4
		(½ doz)	(½ doz)	(½ doz)	(½ doz)	(½ doz)
	rapid shave	21	11	6	0	6
		(½ doz)	(½ doz)	(½ doz)	(½ doz)	(½ doz)
	shampoo	24	4	6	8	3
	shave cream lather or					
	brushless tube	21	8	5	11	3
		15	9	4	4	4
		(½ doz)	(½ doz)	(½ doz)	(½ doz)	(½ doz)
	jar	17	7	4	10	4
		(½ doz)	(½ doz)	(½ doz)	(½ doz)	(½ doz)
	shaving stick refill	11	2	3	1	1
	soap green regular	47	4	12	11	1
		(6 doz)	(6 doz)	(6 doz)	(6 doz)	(6 doz)
	bath	50	10	13	10	1
		(4 doz)	(4 doz)	(4 doz)	(4 doz)	(4 doz)
	family	31	7	8	7	1
		(2 doz)	(2 doz)	(2 doz)	(2 doz)	(2 doz)
	gold	56	6	15	5	1
	regular	(6 doz)	(6 doz)	(6 doz)	(6 doz)	(6 doz)
	bath	59	3	16	1	1
		(4 doz)	(4 doz)	(4 doz)	(4 doz)	(4 doz)
D	Panar (61 APC)					
I	Pandora (1590 Setatome)					
	(distributors 845 GM)					
I	Panolog (1176 Squibb) TSVPO					
	ointment (vet.) 5cc	6	6ea	—	—	9
D	Pantothenic acid (1074 Roche) tablets					
	Paracodin (708 Knoll) sLDD					
	tablets	20	39	0	—	4
	Parador (430 Eucryl)					
	spray	13	6	—	—	—

Parale (346 Dales) tsIDDI paediatric elixir 50mils 4 0ea — — 250mils 12 0ea — —	Paris (301 Coty) perfume cream sachet 264-80 106 9 28 8 15 9	Parke-Davis (938 PD) adrenaline in oil 6 cascara evacuant 80oz glutamic acid tablets 0.5gm glycerine suppositories adults rutin tablets with vit. C25 tuberculin tablets P.P.D. typhoid-paratyphoid A & B 1.5mils	Pears (509 Gibbs) baby powder 16 11 4 8 2 4 transparent soap 9 2 2 6 1 1 13 4 3 8 1 7	Pectocel (413 Lilly) Penidural (1352 Wyeth) T5 oral suspension 250mils hospitals only Penspek (378 Dist) Penspek Sulpha (378 Dist) Pepsodent (509 Gibbs) toothpaste standard 17 2 4 8 2 3 large 24 7 6 9 3 4 economy 32 9 9 0 4 5	Pernaemon (917 Organon) fort ampoules 1 mil 3 Pernomol (718 LAB) chilblain paint 19 0 5 6 2 11 Personna (438 ER) wall-clip shaving set 84 6 23 4 12 6 shaving brush bristle No. 40 45 4 12 6 6 0 No. 42 63 0 17 4 8 6	Pethidine (1074 Roche) powder 1gm Petronet (1127 Seton) (distributors 93 BJ) dressing strip 3 1/2 in x 8 yd 72 0 — —	Philips (977 PE) hand hair dryer HK4100 47 7ea 12 9ea 76 2	Photopia (980 Photopia) exposure meter Accurette — — 39 6 Pifco (983 Pifco) electric blanket Nictime single 6401 53 1ea 14 3ea 85 0 1648 17 5ea 4 8ea 27 11	Pin-up (412 Elida) home perm end-curl 38 2 10 6 5 7 full-head 58 6 16 1 8 8	Piriton (34 A & H) ts7 tablets 4mgm 500 60 10ea — 91 3 Placentubex (1372 CCL) Placentubex (580 DH & Co.) Plantoids (430 Eucryl) chrysanthemum, rose, sweet pea, dahlia. indoor Plus (1565 P. Plus) flashgun sunblitz 1000 — — 161 9 meter Cd5 — — 201 6	Polly (1480 Izal) roll and holder 35 9 4 5 4 6 Polyantibiotic (1263 Upjohn) T5 aerosol (vet.) 110gm 30 0ea — 45 0 Polybactrin (218 Calmic) T5 cream 15gm 7 6ea — — H.C. cream 15gm 11 6ea — — Polysil (1263 Upjohn) (vet.) 12 x 1oz 34 0ea — 51 0 Ponstan (938 PD) Kapsels 125mgm 25 & 250 Potaba (521 Glenwood) capsules 240 48 9ea — 65 0 1000 184 2ea — 245 6 Envules 40 54 0ea — 72 0 tablets 120 21 4ea — 28 6 1000 148 2ea — 197 6	Regnyl (917 Organon) ampoules 100 iu 3 Remomiser (1530 Fisons) 20mils 12 3ea — 18 4 Retexte (730 Lanvin) perfume 1/2oz — — 46 0 1/2oz — — 63 0 handbag spray — — 55 0 refill — — 39 6 toilet water 2oz — — 32 0 retty Poodle (927 OL) dog shampoo 4oz 24 0 6 7 3 6 rocelium (1530 Fisons) ointment — — — — rogestin (917 Organon) ampoules 10mgm 3, 12 & 25 25mgm 3, 12 & 25 rogestoral (917 Organon) tablets 5mgm 25 10mgm 25 25mgm 25 rosol (1249 Trufood) 16oz 81 0 — 8 6 3lb 230 8 — 24 0	Prurex (1530 Fisons) Purr (295 CM & R) 32 0 — 10 Quadrillin (418 Glaxo) Quixalud (1176 Squibb) dispersable powder (vet.) 240gm 25 0ea — 37 6 1.2 kilo 108 4ea — 162 6 Radiomulsin (179 BDH) 115mils 38 0 — 4 9 500mils 138 0 — 17 3 2 litres 39 0ea — 58 6 Rayglo (333 Cupal) worm elixir 16 8 — 2 6 Redoxon (1074 Roche) ampoules 100mgm/2mils 50 500mgm/5mils 3 Regula (980 Photopia) flash unit AG — — 39 6 Remiderm (1176 Squibb) cream (vet.) 5gm 42 0 — 5 3 Reserpinal (238 CL) Ricoh (817 MP5) Ricoh (565 Hanimex) projector Auto 8P Dualmatic Rimifon (1074 Roche) ampoules 50 Rinural (1310 WW) †DDI linctus 125mils 56 0 15 0 8 3 Robitussin A-C (1071 Robins) ts7DDI 20oz 38 4ea — 57 6 Romilar (1074 Roche) tablets 20 Rondo (817 MP5) projector V58 Super 8 — — 399 0 Ronico (1074 Roche) ampoules 50 Rosedale (261 Christy) Rosedale (451 F & J) Roxy (928 Pad) Roxy (555 Haffenden) bathing caps 52 0 5 2 1/2 6 11 rubber gloves 28 6 3 2 3 11 super 35 6 3 11 4 11 Rozalex (1088 Rozalex) No. 1 unperfumed tin 23 3 6 4 1/2 3 3 lanolin skin cream 23 3 6 4 1/2 3 3 Rubrifer Improved (1176 Squibb) (vet.) vial 50 dose 45 0ea — 67 6 6 — — — — Ruelene (1263 Upjohn) concentrate (vet.) 1pt 21 8ea — 32 6 1gal 153 4ea — 230 0 Rumeur (730 Lanvin) perfume 1/2oz — — 46 0 1/2oz — — 63 0 handbag spray — — 55 0 refill — — 39 6 toilet water 2oz — — 32 0 Rynabond (1530 Fisons) ts7 tablets 30 108 0 29 8 1/2 16 0 250 65 0ea 17 10 1/2 115 4 syrup 4oz 69 0 19 0 10 3 Sanette (927 OL) fragrant air 11 6 — 1 4 Sanilav (671 Jeyes) medium 15 0 — 1 8 giant 24 8 — 2 9 Sanitas (1102 Sanitas) powder (sprinkler) 18 0 — 2 0 28lb 23 6ea — 31 4 56lb 38 0ea — 50 3 Sanitas (1102 Sanitas) 1cwt — — — — Sanitas (1102 Sanitas) floor polish — — — — moth tablets — — — — soap Windsor & buttermilk — — — — Sanity (1343 DW) toilet paper — — — — Sankyo (1343 DW) cameras Super CM — — 1190 0 Super 5X — — 1391 6 Super 5CM — — 1590 0 case — — 96 4 projector Dualux — — 990 0 Sarakan (1105 Sarakan) toothpaste 32 0 8 10 4 9 Scandal (730 Lanvin) perfume 1/2oz — — 46 0 1/2oz — — 63 0 handbag spray — — 55 0 refill — — 39 6 toilet water 2oz — — 32 0 Schick (1115 51) electric shavers Cordless 220E 184 8ea 49 6ea 304 2 Lady Schick 107E 64 9ea 17 4ea 106 8 Super 3-speed 233W 135 4ea 36 3ea 222 11 Scram (1116 SP) hairdryer Carousel 312 113 10ea 30 6ea 182 3 Score (172 BMCL) hair dressing 38gm 22 1 5 9 3 0 80gm 36 2 9 6 4 11 Seculop (518 Glaxo)	Sedulon (1074 Roche) Selto (1125 Selto) existing entry Selto (1125 Selto) dental salt 16 7 4 6 1/2 2 4 22 4 6 1 1/2 3 1 Sevilan (1372 CCL) Sevilan (580 DH & Co.) Silcot (786 Mac Donald) sanitary belts popular 14 8 1 7 1/2 1 9 trimline 16 8 1 10 2 0 de-luxe 16 8 1 10 2 0 suedeline 21 0 2 3 1/2 2 6 Silma (1343 DW) existing entry Silma (1343 DW) projectors standard 8 120 M — — 790 0 240 5 — — 1990 0 case — — 110 0 projectors Super 8 120 M — — 799 6 240 5 — — 1190 0 case — — 110 0 Silsan (786 Mac Donald) sanitary towels soluble size 1 6 9 4 — 1 0 12 17 10 — 1 11 Simpkin's (1141 Simpkin) chocolate centred barley sugar butter-scotch 15 0 2 6 2 0 lime 15 0 2 6 2 0 orange 15 0 2 6 2 0 peppermint 15 0 2 6 2 0 glucose winter candy 10 0 1 8 1 3 1/2 lb tins barley sugar drops 25 0 4 1 1/2 3 0 bitter lemon acid drops 25 0 4 1 1/2 3 0 digestive mint drops 25 0 4 1 1/2 3 0 fruit drops 25 0 4 1 1/2
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[illegible]

thick $\frac{3}{16}$ in	gross	35 0	—	gross	49 0	1½ in wide	gross	37 6	—	gross	52 6	265 Clairol=Clairol, Ltd., Stamford House, Station Road, Langley, Bucks. Slough 43261.
extra large oval	gross	—	—	gross	—	1½ in wide	gross	43 0	—	gross	60 3	412 Elida=Elida, Ltd., P.O. Box I.D.Y., 43 Portman Square, London, W.1. Hunter 1200.
thin $\frac{1}{16}$ in \times 2½ in	gross	29 0	—	gross	40 7	stockinettes 12 in wide	gross	—	—	gross	18 3	461 FL=Fibrenyle Ltd., Skylon House, Gosford Road, Beccles, Suffolk, Beccles 2442.
thick $\frac{3}{16}$ in	gross	36 0	—	gross	50 5	zinc oxide plaster	gross	13 0ea	—	gross	—	509 Gibbs=Gibbs Proprietaries, Ltd., P.O. Box I.D.Y. Hesketh House, Portman Square, London, W.1. Hunter 1200.
large oval	gross	—	—	gross	—	½ in	gross	14 3	—	gross	1 8	582 Haywood=J. H. Haywood, Ltd., Abbeyfield Road, Lenton Lane, Nottingham. Nottingham 82581.
thin $\frac{1}{16}$ in \times 2½ in	gross	27 10	—	gross	39 0	½ in N.H.S.	gross	17 6	—	gross	2 0	817 MP5=Mayfair Photographic Suppliers, Ltd., Hempstalls Lane, Newcastle, Staffs. Newcastle 65131.
thick $\frac{3}{16}$ in	gross	36 0	—	gross	50 5	1½ in	gross	23 6	—	gross	2 9	839 Mesco=Mesco Laboratories, Ltd., 10 Holywell Lane, London, E.C.2. Shoreditch 2185.
large round	gross	—	—	gross	—	2 in N.H.S.	gross	26 3	—	gross	3 0	1021 Quants=Quants, Torbay Pharmacy, Torwood Street, Torquay, Devon. Torquay 22458.
thin $\frac{1}{16}$ in \times 2½ in diameter	gross	39 9	—	gross	53 8	2½ in	gross	35 9	—	gross	4 2	1105 Sarakan=Sarakan Products, Ltd., 88 Harley House, Regents Park, London, N.W.1.
thick $\frac{3}{16}$ in	gross	49 7	—	gross	69 5	3 in N.H.S.	gross	43 9	—	gross	5 2	1117 Scrivens=Scrivens, Ltd., Daimler House, Paradise Street, Birmingham, 1. Midland 7975.
fleecy weblight material	gross	—	—	gross	—	4 in	gross	49 0	—	gross	5 9	1412 Jackel=Jackel & Co., Ltd., Kitty Brewster Estate, Blyth, Northumberland. Blyth 2696.
16 in wide	gross	16 4ea	—	gross	22 11	½ in	gross	59 0	—	gross	6 11	1491 Cuticura=Cuticura Laboratories, Ltd., Clivemont Road, Cordwallis Trading Estate, Maidenhead, Berks. Maidenhead 30952.
Foam-O-Felt	gross	—	—	gross	—	1 in	gross	72 0	—	gross	8 4	1531 Delandale=Delandale Laboratories, Ltd., 24 Kilburn High Road, London, N.W.6.
thin $\frac{1}{16}$ in	gross	26 9yd	—	gross	37 6	1½ in	gross	23 6	—	gross	2 9	1564 JR&S=James Robertson & Sons, Ltd., 138 Bromley Road, London, S.E.6. Hither Green 1131.
med $\frac{1}{16}$ in	gross	32 0yd	—	gross	44 10	2 in	gross	26 3	—	gross	3 0	1570 BN=Baby Needs, division of Jackel & Co., Ltd., Kitty Brewster Estate, Blyth, Northumberland. Blyth 2596.
Polyfoam	gross	—	—	gross	—	2½ in	gross	33 3	—	gross	3 11	
thin $\frac{1}{16}$ in	gross	19 9yd	—	gross	27 8	3 in	gross	40 6	—	gross	4 9	
med $\frac{1}{16}$ in	gross	26 3yd	—	gross	36 9	4 in	gross	54 6	—	gross	6 4	
sponge rubber	gross	—	—	gross	—	1 in	gross	68 9	—	gross	8 0	
spread, flexible cloth	gross	—	—	gross	—	2 in	gross	88 9	—	gross	10 4	
18 in wide	gross	17 0ea	—	gross	9 10	3 in	gross	97 0	—	gross	11 1	
straps, 18 in long	gross	—	—	gross	—	4 in	gross	125 6	—	gross	14 9	
lin wide	gross	30 6	—	gross	42 9							

THIS WEEK'S CHANGES

Prices are given in the sequence Trade Price per Doz.; Purchase Tax per Doz.; Retail Price. Bold upright figures (2 9) in the retail price column indicate that the price is subject to resale price maintenance; italic figures (2 9) that it is recommended by the manufacturers; and light upright figures (2 9) that it is "notional" as a guide to the retailer in determining his own retail price.

Andre Philippe (48 AP)									
lacquer refill bottle 9									
Antistin (262 CIBA)									
ampoules									
Antistin-Privine (262 CIBA)									
solution 20 oz.									
Aprisoline (262 CIBA)									
tablets 25mgm 500									
50mgm 500									
Coramine (262 CIBA)									
liquid 25% 500 mils									
Denman (270 EC)									
Denman (22 RA)									
bath brush	D.18	30	0	7	9	4	7		
set	D.28	51	8	14	2½	7	8		
circular massager									
	D.6	5	0	1	4½	9			
comb									
Mary Anne									
fanail	D.10	6	8	1	10	1	0		
rat tail	D.11	6	8	1	10	1	0		
minor	D.16	5	0	1	4½	9			
corn eraser	D.34	13	0	3	7	1	11		
hairbrushes									
de luxe									
natural	D.37A	200	0	55	0	29	11		
ebonised	D.37B	200	0	55	0	29	11		
minor	D.3	50	0	13	9	7	6		
styling	D.1	17	3	4	9	2	7		
	D.1A	26	0	7	2	3	10		
	D.1B	17	3	4	9	2	7		
	D.4	82	8	22	8	12	6		
	D.5	136	8	37	7	20	3		
tangle & curl									
	D.14	26	0	7	2	3	10		
gent's Debonair									
twin	D.23A	40	0	11	0	5	11		
handbag brush									
	D.33	12	0	3	3½	1	9		
hand toilet brush									
	D.19	17	3	4	9	2	7		
nail brush rose									
	D.8	5	0	1	4½	9			
perfect	D.17	6	0	1	8	11			
oval stimulator									
	D.7	13	6	3	8½	2	0		
Dianabol (262 CIBA)									
drops									
Dippy-do (1242 Toni)									
hairspray	28	1		7	9	4	11		
Doriden (262 CIBA)									
tablets 25									
Esidrex (262 CIBA)									
tablets 25mgm 25									
50mgm 25									
Galjado (1282 VB)									
grey hair pomade	28	0		7	8½	4	0		
hair colour restorer	36	0		9	11	5	3		
hair darkening									
brilliantine	17	0		4	8	2	3		
scurf & dandruff	30	0		8	3	4	6		
lotion	30	0		8	3	4	6		
scurf pomade	24	0		6	7	3	6		
Ismelin (262 CIBA)									
tablets 10mgm	25								
25mgm	25								
Kleenex (702 KC)									
tissues Silk Soft	72	9	0	—	—	1	0		
handy	150	15	9½	—	—	1	9		
<div> A = Price Advanced R = Price reduced ● = New entry D = Delete C = Correction I = Insert </div>									
regular	100	15	9½	—	—	1	9		
	150	22	6½	—	—	2	6		
pocket pack	24	2	8	—	—	2	4		
for men	100	24	9	—	—	2	9		
Prettyprint	150	24	9	—	—	2	9		
existing packs									
Kodak (711 Kodak)									
Brownie 127 camera									
outfit	42	2ea	10	6ea	73	11			
Komed (187 BS)									
lotion	1oz	71	0	19	6	10	7		
Navidrex (262 CIBA)									
tablets 25									
Navidrex K (262 CIBA)									
tablets 25									
Neuro-Trasentin (262 CIBA)									
tablets 200									
Nupercaine (262 CIBA)									
base Sgm									
hydrochloride Sgm									
Optrex (690 Keldon)									
eye ointment	20	0		5	6	2	6		
Priscol (262 CIBA)									
ointment 10%									
Reverie (1335 Yardley)									
talcum	2807	50	0	13	9	7	5		
Robaxisal (1071 Robins)									
tablets 50									
tablets 100									
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AMENDMENTS AND ADDITIONS TO KEY TO SUPPLIERS

22 **RA = Roy Aitken & Co.,** 18 Regent Street, London
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336 **Curacho = Curacho Co.,** 85 Putney Bridge Road,
London, S.W.15. Vandyke 9566.
537 **Grasshopper = Grasshopper, Ltd.,** Colewood Road
Industrial Estate, Swalecliffe, Whitstable, Kent. Chest-
field 2761.
786 **Macdonald = Macdonald & Son, I** Great Cumberland
Place, London, W.1. Ambassador 0133.
842 **Milesden = Milesden, Ltd.,** 11 Queens Road, Her-
sham, Surrey. Walton-on-Thames 26296.

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A Threat to Hospital Pharmacists

It would seem that there is a growing concern for the welfare of the overworked hospital pharmacist. The Ministry is encouraging him to train technicians in order to relieve himself of the tedious tasks of dispensing prescriptions; the Hunt Committee thinks that there is really no necessity for him to waste his time on purchasing drugs and recommends that the job should be done for him by a supplies officer, and the Nuffield Provincial Hospitals Trust considers it "unlikely that the pharmacist has the necessary standing" to be given responsibility for the organisation of a Central Sterile Supply Department and thinks that the Control of Infection Officer would be a more suitable person to undertake the job. Now the *British Medical Journal* has joined the ranks of those who feel that hospital pharmacists do too much. A leading article in last week's issue of that paper suggests that it is high time that the burden of responsibility for keeping doctors informed about new drugs, and particularly their interactions and special contraindications, should be taken from the shoulders of the "understaffed and overpressed hospital pharmacist." That, it feels, is the job of the clinical pharmacologist, and it goes on to argue the case for the establishment of a hospital pharmacological service with a consultant clinical pharmacologist at its head. Such a department would meet the growing need of hospital medical staff and general practitioners for advice on prescribing. It would also organise and conduct clinical trials and undertake research into the absorption and fate of drugs in man.

There can be no doubt that the loss of his advisory functions would come as a particularly bitter blow to the hospital pharmacist. Since pharmacology became part of the curriculum he has, with some encouragement from the Pharmaceutical Society, come to look upon himself as something of an authority on drugs and their properties rather than as a dispenser of prescriptions. However, if technicians took over dispensing and supplies officers the purchasing of drugs there would still be an increasing need for expert advice if modern drugs were to be used safely and effectively, and who better than the pharmacist to give it? It is now proposed that he should be relieved even of that responsibility, and if it is eventually taken from him one must have grave doubts whether there will be anything left for him to do.

To those who have followed recent developments in the organisation of clinical biochemistry the views expressed by the *British Medical Journal* will not come

entirely as a surprise. Hospital biochemical laboratories are slowly but surely turning into departments of chemical pathology under the charge of medically qualified chemical pathologists and the days of the non-medically qualified biochemist are numbered, at least so far as the headship of a department is concerned. Yet between 1958 and 1963 33 per cent. pharmacologists appointed (in academic departments, medical schools and schools of pharmacy) were pharmacists.

The establishment of a hospital pharmacological service headed by medically qualified clinical pharmacologists (there can be no such thing as a non-medically qualified *clinical* pharmacologist) would inevitably have a serious effect on the development of hospital pharmacy. Some teaching hospitals have already made such appointments and it would be foolish to assume that the idea will not spread, or that it does not represent a serious threat, not only to hospital pharmacists, but ultimately to the profession as a whole.

Because the province of the pharmacist is not clearly defined it is in constant danger of erosion, a fact of which those in general practice are only too well aware. A clear unequivocal statement of what the Society believes to be pharmaceutical territory, and a promise to defend it with all the energy and vigour displayed in the fight against the abolition of Retail Price Maintenance, would do much to boost the morale of the hospital pharmacist and improve his chances of successfully resisting this new threat to his existence.

Not Solved by Delays

"A harrowing human problem which no country in the world has yet solved or eliminated" was how Miss Alice Bacon (Minister of State, Home Office) recently described dependence on drugs. She considered that the question drug abuse was, of all social problems facing the Government, the most obscure and difficult to handle wisely and with effect. Little was known, said Miss Bacon, of the extent of drug abuse, its variety, causes, trends and influences. Even in treatment there was no sure basis—with proven successes—for advocating specific methods.

The Minister was speaking at the first meeting of the Advisory Committee on Drug Dependence (see *C. & D.*, November 5, 1966, p. 437) to which had been given the task of keeping the problem under review and suggesting remedial measures. She told the Committee that the Government was concerned to give positive aid to those in the grip of addiction and unable to help themselves.

Was there, however, a slight hint of "passing the can" when she went on to say that the members of the Committee had wide terms of reference and would "not be timid in suggesting effective and comprehensive ways of measuring, studying, combating and reducing addiction and abuse." There was plenty of scope she declared, for new ideas and bold tactics. Those words, coming as they do 14 months after the Brain Committee submitted its latest report (see *C. & D.*, November 25, 1965, p. 540) and at an even greater lapse of time since the Home Office D.D. Inspectorate announced a disquieting increase of heroin addiction in the United Kingdom, and especially among the young (see *C. & D.*, August 21, 1965, p. 167), serve but to highlight the Government's failure to show any positive results, beyond the appointment of the new committee, in dealing with the problem.

There have, of course, been announcements in Parliament that negotiations were in hand. Precious little else seems to have happened. It must in fairness be recognised that the illness and untimely death of Lord Brain may have caused some Government plans to be changed, but that offers no real excuse. What seems to

have governed the situation is a reluctance to arrive at decisions on the important recommendations the Brain Committee made in its report.

The problem is one that will not stand still. If it is not arrested by firm action it will insidiously extend—there are signs that it is already doing.

Correspondence

Letters when received must bear the name and address of the sender, not necessarily for publication. The Editor does not hold himself responsible for the views expressed.

Another "Prize" N.P.

SIR,—E. C. Tanners "prize" N.P. prescription (*C. & D.*, January 21, p. 60), prompts me to submit the following for a similar prize. We received a prescription for insulin with "N.P." hand-written. Does this mean that any other insulin scripts from this doctor should be stripped and just labelled "The Injection"?

F. H. HADEN,
Stourbridge, Worcs

Pharmacists and S.E.T.

SIR,—Concerning your paragraph "Employment Tax" (*C. & D.*, January 14, p. 25) this tax is a cruel and crushing imposition on all shopkeepers, especially smaller ones. Surely pharmacies could be excluded as, in truth, dispensing is a form of manufacturing. We wonder that so little comment has been made on this iniquitous imposition and cause of unemployment, especially amongst older and part-time workers.

A. G. FENNELL,
Bournemouth

Dammar

SIR,—I was most interested to see the illustration in "Onward from Galen" (*C. & D.*, December 31, 1966, p. 621) of drug jars used by Miss V. E. Lewis for a Christmas card and the letter from Mr. John R. Napier commenting on the jar labelled "Dammar". We are indeed flattered if these jars are in Miss Lewis's private collection, for they are [as Miss Lewis herself point out last week, p. 56] actually modern reproductions, and two examples of a series provided by my company to retail and hospital pharmacists some years ago. Dammar is referred to in the B.P.C., 1928 (p. 386) as a generic term for a number of different resins of which only East Indian or Singapore dammar is seen on the English market in quantity. East Indian dammar is derived from the Amboyna pine (*Dammara orientalis*) and is sometimes referred to as Manila copal or mastic. In pharmacy, dammar was occasionally used as a constituent of plaster masses.

WILLIAM R. WARNER & CO., LTD.
PETER T. HAIRSNAPPE,
Marketing manager

Antihistamines on Prescription

SIR,—I note that the Poisons Board proposes to include all antihistamines *per os* once again as Schedule 4B poisons. I agree with the remarks made in your leader (*C. & D.*, January pp. 59-60) and would be interested to learn of the reasons put forward for this step. If it is because the antihistamines pro-

duce drowsiness in the susceptible individual who may be driving a car, then surely all wines, spirits and beers should be equally restricted to "prescription only." Apart from their widely accepted value as travel sickness remedies, the antihistamines are equally universally used in hay-fever attacks. This application becomes especially apparent during the peak months, May to July every year. In this business I meet many who suffer from that complaint, and they have learned better than anyone else what to take for it. I have yet to meet any abuse in this connection, and restricting these drugs in this manner is bound to create hardship to the majority of responsible users. Furthermore it will increase the burden on the general practitioner and add unnecessary expense to the National Health Service. I invariably make a point of seeing all those who may ask for these remedies for hay fever, and make sure that they know what they are taking, guiding them if necessary on dosage, etc. In other words they are sold only under my personal supervision in the strictest sense. Surely pharmacists in general are able and qualified to accept that responsibility? From experience, those who abuse drugs will always find a means of getting what they want, even by means of a prescription—private or N.H.S.

D. PRICE ALLEN,
Clifton, Bristol, 8

Cash in the Till

SIR,—Your correspondent Xrayser once wrote something to the effect that there was no better way of getting to the bottom of a matter than to air it in your correspondence columns. With that thought as my excuse, may I be allowed to start to stir things up with the following true story? One evening recently I had to take a prescription to a "rota" chemist. It was a genuine emergency, and there were several good reasons why I could not dispense it myself. And anyway, it is always interesting to see how the other half lives. In this particular case, it also proved to be a little disconcerting! I was in the shop for about a quarter of an hour. During that time there were always about six or seven customers waiting—as soon as one left he was replaced by another. There were two dispensers working hard to keep abreast of the flood of prescriptions coming in. There was also a girl whose job was to take in the prescriptions and to wrap and hand out the finished products. After a few minutes a man came in. When the girl

approached him for his prescription, he said that he had not got one, and asked for, of all things, a packet of hair dye. Had that happened in my pharmacy on a "rota" night, he would have been politely told that we were open for medicine only, and I quite expected to hear the girl say the same. Instead, she left her post and took him down to the far end of the shop, where they spent some time looking at hair dyes, before he left with the one he wanted (retail price 2s. 6d.). This was the signal for two women who had been waiting for medicine, and who, until then, obviously had had no thought of doing any "shopping," to go marching down to that end of the shop, and they, too, were served with cosmetics. The girl spent several minutes over these three customers, while the prescriptions continued to roll in, the pile of unwrapped bottles on the dispensary bench grew bigger and bigger, and the customers whose medicines were ready were kept waiting longer than necessary. No blame can be attached to the girl, as she was obviously doing what her employer expected of her. I do feel, however, that the severest censure is deserved by the employer. Here was a pharmacist whose greed was letting the whole profession down. We hear a lot these days about professional status. Dedicated pharmacists are trying to improve our standing in the eyes of the public. This man has done incalculable damage to that ideal. The "rota" service after normal hours is provided for the supply of urgently required medicines, and for that purpose alone. This man has made it appear, not only to the three people that were served, but to their families and friends, and to the other folk waiting in the shop, that the "rota" is merely an extension of shopping hours; and that his primary interest (and, by implication, the primary interest of all pharmacists) is cash in the till. How can pharmacy expect to be regarded as a truly professional profession when it has practitioners like this man, who cannot forego the tinkle of the till even for one hour in the day, in order to do the professional job that he is supposed to be doing? So long as pharmacists behave the way this man did, so long will the public (and the authorities) find it impossible to take seriously the contention that pharmacy is a profession at all. Esau was condemned because he sold his birthright for a mess of pottage. What condemnation is deserved by the pharmacist who seels his whole profession for a few bob in the till?

JOSEPH SOAP.

FILMS TO PROMOTE PRODUCTIVITY

Ways to greater reliability in manufacture, more efficient retailing

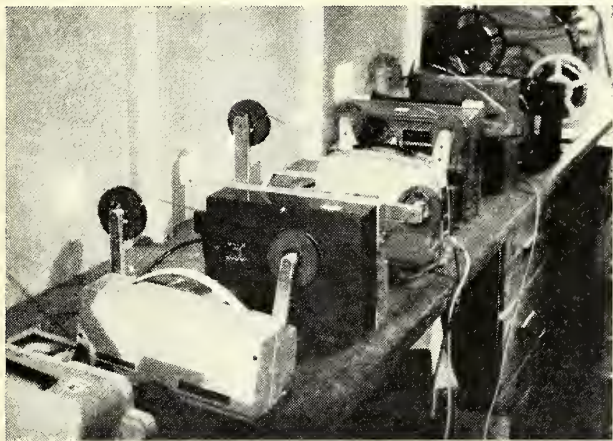
THREE films just issued by the British Productivity Council deal respectively with the "building-in" of reliability into a product by following a 6-point programme; the use of critical path analysis as a planning tool and medium for communication; and with retail stock management. All the films may be purchased from the Films Department, British Productivity Council, Vintry House, Queen Street Place, London, E.C.4, or hired from Central Film Library, Government Building, Bromyard Avenue, London, W.3.

Reliability: An Introduction

ANVIL FILMS. *Central Film Library U.K.* 1822. 16-mm.

Black and white. Sound. Running time 30 minutes.

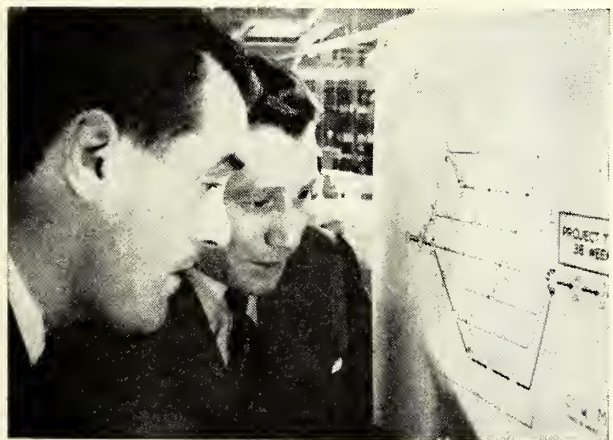
THE aim of the film is to outline the meaning of a total reliability programme. It illustrates the basic functions that



Running 8-mm. projectors continuously to test their reliability.

are carried out by a number of manufacturers employing the programme. The importance of the reliability half of the "Quality and Reliability" is illustrated in a number of ways — the first shows an airliner approaching London airport in fog and the pilot pinning his faith in the thousands of workmen who took part in the production of his instruments and other landing gear. The film describes how reliability can be built into a product in six steps:— market specification, design specification, product testing and service feed back (providing all information about the product). It stresses that the impetus for such a programme must come from the top — without an efficient management an end product that is "right for the job" will not be achieved.

Critical Path in Use.



Plotting the critical path showed how two weeks could be saved in delivery time.

BASIC FILMS. *Central Film Library, U.K.* 1826. 16-mm. Black and white. Sound. Running time 28 minutes.

THE film traces an unidentified project from initial planning to near completion. One character acts also as a lecturer, and the device of lecturer-participant is used throughout the film to allow information to be given without loss of continuity in the story. Emphasis is on the degree to which management must commit itself on "timing and logic".

Retail Stock Management.

WORLD WIDE PICTURES. *Central Film Library, U.K.*

1831. 16-mm. Black and white. Sound. Running time 23 minutes.

THE film takes twenty-three minutes to convey the message that stock control helps a shopkeeper to increase his stock turn and therefore his profits. Roy Hudd plays the part of a shop assistant who has acquired some capital and decides to set up on his own. The film, which ought to be the most suitable for audiences of pharmacists in general practice, is unfortunately the poorest of the three. It never succeeds in convincing that Roy Hudd is anything but an accomplished comedian making a facetious charade out of retailing. That is hardly his fault since the trouble arises from



Roy Hudd as shopkeeper shows surprise that he must count his stock.

the patently patronising attitude of the producers to shop-keeping, and from their apparent belief that shopkeepers are incapable of grasping a meaning unless it is presented as farce and rammed home repeatedly.

NEW BOOKS

Dr. Thomas Sydenham (1624-1689): His life and Original Writings.

KENNETH DEWHURST. *Wellcome Historical Medical Library*, 183 Euston Road, London, N.W.1. 9 x 5 3/4 in. Pp. viii + 191. 35s.

It is a measure of the greatness of Dr. Thomas Sydenham that his life and his work are still the subject of study three centuries after he published the results of his five-year study of the London epidemics. In 1963 Kenneth Dewhurst published an excellent account of the life of John Locke, Physician and Philosopher, and it was almost inevitable that that study should have led him to Sydenham, for the names are inseparable. Dr. Dewhurst is not the first to have had the force of that brought home to him, for exactly 100 years ago Dr. John Brown wrote a characteristic essay entitled *Locke and Sydenham*, which threw new light on the lives of the two men. In Dr. Dewhurst's book only the merest mention is made of Dr. John Brown, but I commend all those who read the new volume to read also the masterly essay in Brown's *Horae Subsecivae*. The present volume takes the form of a very full account of Sydenham's early life, which was considerably disrupted by the Civil War, in which the Sydenham family were

engaged, so that Thomas was not permitted to settle until he was over thirty. The importance of the present work lies in the publication of some of Sydenham's manuscripts, as originally written by him in English. For many years all that was available was the retranslation from Latin of manuscripts written in his native language by Sydenham, but which had been translated by other hands into Latin. Sydenham complained frequently of persecution by his contemporaries, but though Dr. Dewhurst gives some examples of hostile reaction to the man and his methods, he feels that there is insufficient evidence "to justify the picture of constant persecution which Sydenham so monotonously paints." It has ever been the way of the world to look with suspicion and scorn on innovation, and Sydenham was not one to accept current beliefs blindly. It is just possible, also, that politics played a part.

The second part of Dr. Dewhurst's study is devoted to Sydenham's original writings, which include the famous *De Arte Medica* and *Theologia Rationalis*, besides his works on fevers, smallpox, pleurisy, dysentery and tussis. There is particular interest for the pharmacist in some of the prescriptions contained therein, of which the author gives a full translation. They indicate clearly the inadequate weapons at the physician's disposal to fight such dread diseases, but Sydenham's method were such as to give nature every possible assistance in the struggle towards possible recovery. A final chapter is devoted to the publication of letters, in which the correspondents were Sydenham, Locke, Mapletoft and others. The volume is a splendid addition to a wholly admirable series, and it is

extremely readable. Although Sydenham may have had occasion in life to complain of the fates that persecuted him, in his case the good has not been interred with his bones. His fame reached far beyond his native land, and only a year ago the reviewer, on a visit to France, had the pleasure of handling a bottle labelled "Tinct. Opii Sydenham." I commend this book with only one reservation—that those who read it, read also Dr. John Brown.—C.G.D.

Laboratory Handbook of Toxic Agents

C. H. GRAY (editor-in-chief), *Royal Institute of Chemistry*, 30 Russell Square, London, W.C.1. 8½ x 5½ in. Pp. ix + 190. Second edition. 24s.

THE second edition of this handbook has been extensively revised to take account of increasing use of toxic materials. About forty substances have been added to the main section on "Poisonous and Corrosive Gases, Reagents and Solvents," bringing the total to over 250. The effect of each on the human body and details of emergency first-aid measures are described. Entries are arranged alphabetically—printed on blue paper for quick recognition—and cross-referenced. The figures for maximum allowable concentrations have been replaced by the threshold limit values as accepted by the American Conference of Government Hygienists. The kiss-of-life and Silvester methods of artificial respiration are now illustrated in the revised section on "First Aid in the Laboratory" and the section on "Precautions Against Radiations" has been completely rewritten.

Indian Pharmacy Finding Its Feet

A RECENT BOMBAY CONGRESS REVIEWED

K. A. LEES, F.P.S.

ACCENT in the development of the pharmaceutical industry, like that of all current economic activity in India, must be on self-sufficiency, said MR. V. P. NAIK (Chief Minister, Maharashtra State) when he opened the 18th annual conference of the Indian Pharmaceutical Congress Association, held in Bombay, December 27-30, 1966. It could be said that the pharmaceutical industry had been developing at such a rate in the State of Maharashtra that before long it could take the place of the textile industry, which hitherto had been regarded as the premier industry of the State. Sufficient Indian technical talent was now available to make India independent of drug imports and the Minister urged pharmaceutical companies to spend more on local research.

Ten Years' Advances

DR. B. SHAH (Industrial Adviser (drugs) and Director General of Technical Development, Government of India) reviewed the progress and development of pharmaceutical and chemical-based industries and again drew attention to the considerable advances that had been made in India

during the past ten years. Dr. Shah acknowledged the need to reorient the Indian educational system to produce an adequate supply of properly trained manpower for industry. In particular he referred to a problem that many in Britain will also acknowledge, namely the need to ensure close co-operation between educational institutes and manufacturing units so that awareness of the problems trainees are likely to face actual work can be obtained.

The working sessions of the Congress opened with papers in pharmaceutical chemistry. The quality of the papers and discussion confirmed a preliminary view obtained by inspection of the titles that it is in that field that Indian research activity predominates. Judging by the number of people who have approached the writer to talk about mutual friends in Britain, much of the enthusiasm stems from the stimulus received during graduate and post-graduate studies at London schools of medicinal and pharmaceutical chemistry. The influence of the United Kingdom is clear, and one can also recognise the great value of some of the simpler books on pharmaceutical subjects written by U.K. authors. The "gospel" value of such publications is not always recognised when they are read casually in England.

There is clearly much to be done in Indian schools of pharmacy to improve the standard of tuition in pharmaceuticals. Papers in pharmaceuticals were fewer than in the sections of pharmacognosy, phytochemistry or pharmacology, and embraced subjects such as "Jowar starch as a binder and disintegrant" (one wonders how Jowar starch compares with potato or maize starch in bacterial content), preservatives for parenteral preparations, antifungal ointments and the quality of absorbent cotton wool.

Local Problems

Many of the workers are wrestling with local problems. Tin is prohibitively expensive in India as a packaging material, whereas bauxite, being indigenous, gives rise to plentiful supplies of aluminium, the specification for which differs from accepted European specifications. The discussion wisely turned to the need to do tests specifically on Indian aluminium in order to establish its acceptability. Low-density polythene is produced in India, but not high-density



The chief minister of Maharashtra State (Mr. V. P. Naik) talks to two members of the staff of Glaxo (India), Ltd.

polythene or polypropylene. Pilfer-proof tablet bottle closures fabricated in polythene and requiring a special vial neck contour are gaining in popularity. The scientific section of the Congress was notable for an excellent review of biopharmaceutics, "The Influence of Formulation on Drug Action," by Professor K. Munzel, of Basle, Switzerland.

A pharmaceutical industrial and scientific exhibition was organised for the duration of the Congress, and typical pieces of pharmaceutical production equipment were displayed. They had been fabricated locally as unashamed copies of European equipment made available to the fabricators by various industrial laboratories, which had imported them before the recently applied import restrictions. The finish on most of the equipment left much to be desired.

There was a notable difference in the calibre of Indian pharmacists between those who had had the opportunity to travel to England or the U.S.A. and those who had not. Indeed some pharmacists had been known to include "England returned" as an addition to other academic qualifications. That emphasises the great need for mature guidance in Indian pharmacy, not only among the scientists but also amongst the government administrators who, on

more than one occasion, took an oversimplified view of how to approach their problems.



The author in Bombay examines a sample of lemongrass, an indigenous raw material for vitamin-A synthesis.

Pharmaceutical Society of Ireland

MONTHLY MEETING OF COUNCIL

(Concluded from THE CHEMIST AND DRUGGIST, January 21, p.64)

CONTINUING the discussion on the Medical Preparations (Control of Sale) Regulations, 1966, MR. D. J. KENNELLY said that all a local health authority inspector could do was inspect a file or prescriptions relating to controlled preparations.

THE PRESIDENT considered that, while it would be open to county managers to act independently, they would probably work to rule.

MR. T. R. MILLER, while agreeing with the fears expressed, considered that the regulations were only an interim measure and that the matter would resolve itself. On his suggestion it was agreed that the deputation should seek further clarification from the Minister.

MR. KENNELLY: While I understand the anxiety of members, I do not think we have anything to worry about.

Special Meeting on Regulations

THE REGISTRAR reported that he had written to the Department pointing out that a special meeting of the Council had been held on December 19, 1966 to consider the regulations and stating "The Council realises that the regulations are merely an interim measure, pending completion of the regulations under the Poisons Act, 1961. While it is accepted that incorporation of earlier regulations into a single instrument is a big advantage, some aspects of the new regulations are a source of uneasiness. The most obvious is the total restriction on preparations containing warfarin sodium. Absence of a clause permitting this drug to be incorporated in rodenticides is a cause of great concern. It is desirable that rodenticides, including warfarin preparations, should be sold only by authorised persons, but it is not reasonable to require a medical prescription for their purchase. It is urged that immediate action be taken to rectify a patent oversight." The letter concluded, "The Council, and many medical practitioners, consider it is a grave hardship on the public to require a medical prescription for the supply of topical preparations of antibiotics. Topical preparations are free of control in most countries. In the absence of a general health service in this country it is too much to expect a visit to a doctor every time a tube of an antibiotic cream is needed, and the Council does not believe that the Minister would wish to inflict unintentional hardship on the public. The use of such preparations is less hazardous to public health than liberalising antibiotics for animal foodstuffs. This inconsistency can be remedied by including topical

preparations of antibiotics in the Second Schedule." The registrar said he had received a formal acknowledgment of the letter.

The Council decided to write to the Director-General of Radio-Telefís Éireann requesting to be furnished with a copy of a topical talk delivered over Radio Éireann on January 7 in relation to "rackets" in business. A letter received from Mr. Luke A. Kiernan, M.P.S.I., Limerick, stated that he had heard the talk and that, far from improving the image of pharmacists, it had tended to tarnish them. THE PRESIDENT reported that he had been inundated with protests from members all over the country since the talk had been given. He had not heard the talk himself, but members who heard it felt aggrieved. He understood that the speaker had described the practice of charging a fee for a prescription as "a racket." The law adviser had been instructed to request the Director-General to furnish them with a copy of the talk. "If the talk has described dispensing as a racket we shall have to take a serious view of it, and I would like authority to be given to me to take what further action I may think fit." On the motion of Mr. Harty it was agreed to give the president the necessary authority.

MR. MILLER said he was perturbed at a leading article in the January issue of the *Irish Chemist and Druggist*, a journal approved by the Society saying that pharmacists should negotiate individually with local health authorities, when both the Society and the Irish Drug Association, through their elected representatives, had decided that there should be a negotiating committee.

THE PRESIDENT said the matter was even worse, because the White Paper stated specifically that it was hoped to negotiate a scheme with "representatives of the retail pharmacists" and not with individuals. This seems to be a deliberate attempt to sabotage organised representatives of pharmacists."

MR. M. F. WALSH suggested that the registrar should write to the Editor of the journal, pointing out the error and deprecating recent trends in editorial opinion. The Council went into committee to consider what action should be taken.

MR. WALSH reported that, as instructed, he had made inquiries into the possibility of having a suitable library established in the college. Professor Timoney, (the Dean) had agreed to act *pro tem* on the committee which it was proposed to set up to look into the matter. It was also in-

tended to have another member of the college staff on the committee. Messrs. Boles, Corrigan, Cremen, Kennelly and Semple, together with the officers of the Council and the registrar (in his capacity as a pharmacist) were also appointed on the committee, and he also intended to approach the Irish Pharmaceutical Association, the pharmaceutical industry, U.C.D. and the chief librarian of the Royal Dublin Society with a view to having those interests represented.

Farm Hygiene Booklet

MR. D. W. P. BOYD (director-general, Post-graduate Education Committee) wrote stating that the material for the proposed booklet on farm hygiene, which the Society was hoping to bring out for Animal Week, was now ready for production. He asked whether it was intended that the Committee should now take the initial steps in producing the booklet; what form it should take; whether the Society would under-write the venture in the event of demand being insufficient to meet costs; whether it was intended to have advertisements in the booklet, and, if it was proposed to have a foreword, by whom it should be written.

THE PRESIDENT reported that he had met the chairman of the Pharmaceutical and Allied Industries Association, Ltd. (Mr. Dover), and had discussed the proposal that pharmacists should play a full part in the coming Animal Week. He understood that Mr. Dover would be getting in touch with the veterinary subcommittee of his organisation. Since the matter had last been before the Council he had further contact with a senior official in the Department of Agriculture, who had been helpful and enthusiastic about the rôle which pharmacists could play in stressing the need for hygiene on the farm. He hoped to have further talks with Mr. Dover and members of the veterinary subcommittee in the near future.

MR. MILLER said that the President deserved the best thanks of the Council for his efforts in this matter. If they were going to produce a booklet it should be a good one. MR. WALSH agreed. Replying to MR. O'DONNELL, THE PRESIDENT said it was not intended that the booklet should be distributed to farmers.

MR. R. J. POWER said that rural pharmacists would be holding a meeting in February to consider various matters and the veterinary subcommittee would be more than anxious to be kept in touch with developments. He could assure the president of its whole-hearted co-operation.

It was agreed to subsidise the booklet in the event of it not breaking even financially.

Arising out of the Law Committee report, it was decided that a "Guide" to the 1966 Control of Sales Regulations should be prepared and circulated to members.

MR. KENNELLY asked that the exempted preparations intended for veterinary use should be set out in a covering letter, all pharmacists being urged to observe the regulations in the spirit as well as in the letter. That was agreed to. Mr. Kennelly stressed that a thoughtless person, by failing to observe the regulations rigidly, could easily destroy the good reputation of pharmacists.

THE REGISTRAR reported that there had been numerous requests from pharmacists and medical officers for a guide to the regulations.

THE PRESIDENT said they should impress upon the Department that a legal obligation should be laid on manufacturers to indicate the schedules of all preparations. At present pharmacists were so busy trying to analyse the various regulations that they had scarcely time to dispense prescriptions. The whole matter had become highly complex. "I have great sympathy for pharmacists, especially elderly pharmacists, who are confronted with these Regulations and are trying to observe the law." Replying to MR. WALSH, THE REGISTRAR said that the guide, which would be prepared forthwith, would be supplied to members and associates gratis. Other people requiring it would be entitled to buy it.

Professor Paul J. Cannon (department of pharmacology, U.C.D.) wrote stating that he had noted that, at the December meeting of the Council, Professor Timoney had written of the College's participation in the recent science exhibition organised at the Royal Dublin Society. He wished to draw attention to the pharmacology section of the exhibition and said that, in view of the indivisibility of pharmacy, and because the profession was represented at the exhibition by two stands, one for pharmaceuticals and the other for pharmacology he would like full recognition to be paid to his staff at the exhibition. The aim of the exhibition had been primarily to show young people the wide, non-clinical scope of modern pharmacology. Messrs. J. Doherty and J. Holly and Miss Mary Broe (all pharmacy graduate teachers), and Mr. Martin Murphy (final-year pharmacy student), together with their young medical colleagues and teaching staff, had carried out a programme that had gone without a hitch.

Wonderful Liaison

THE PRESIDENT said he would like to offer the best thanks of the Council to those responsible for the wonderful liaison and co-operation that had existed between the two displays at the exhibition. "I feel the best thanks of the Council are due to Professor Cannon. As president, I would like to be kept informed of all developments in pharmacology because we realise the importance of this subject." The president paid tribute to Professor Cannon for his great interest in pharmacy and for his outstanding co-operation with the Society in furthering the interests of pharmacy.

When a letter from Mrs. Mulreany (wife of Council member Mr. Michael Mulreany) was read stating that he was ill and unable to attend, THE PRESIDENT said, "I would like you all to join me in sending our best wishes to Mr. Mulreany for a speedy recovery, and hoping that he will be with us soon again." Apologies for inability to attend were also received from Messrs. Cremen, Costello, Loughman and M. Power.

THE REGISTRAR reported that the Council had received Christmas greetings from the Apostolic Nuncio, *An Taoiseach*, the Ministers for Health and Education, the presidents of the Pharmaceutical Society of Great Britain and of Northern Ireland, the chairman of the Scottish Department, Pharmaceutical Society of Great Britain, the Pharmacy Board of New Zealand, the *Real Academia de Farmacia*, *Danmarks Apotekerforening*, Pharmacy Board of Victoria, Pharmaceutical Societies of Western Australia, Victoria, and Zambia, the Canadian Pharmaceutical Association, the president, University College, Dublin, the Commissioner, *Garda Síochána*, the Irish Drug, Irish Pharmaceutical, Irish Pharmaceutical and Medical Representatives and Irish Pharmaceutical Students' Associations, the Benevolent Fund Dance Committee and many pharmaceutical firms.

THE REGISTRAR reported on the deaths of John J. Sullivan, M.P.S.I.; Thomas J. Burke, L.P.S.I., and D. F. McCarthy, L.P.S.I. Mrs. Anne M. Cutler (née Lowe) was restored to the Register of Pharmaceutical Assistants.

Mrs. Ellen Philomena Butler, L.P.S.I., Abbey Street, Wicklow; Mrs. Eileen Hassett, L.P.S.I., Ballyhannon House, Quin, co. Clare, and Sean Maire Seosamh O'Duibhir, L.P.S.I., 34 Priomh Sraid, Caiseal Mumhan, co. Tiobraid Arann, were elected to membership.

Eileen MacMahon, L.P.S.I., Clonmellon, Navan, co. Meath; Thomas V. Walsh, L.P.S.I., Celbridge, co. Kildare; John J. Holly, L.P.S.I., 120 Rock Road, Booterstown, co. Dublin, and Gerald David W. M. Golden, L.P.S.I., 200 Barton Road East, Dublin, 14, were nominated for membership.

The following changes of address were noted: Patrick O'Neill, M.P.S.I., to 4 Quay Street, New Ross, co. Wexford; Michael R. Pettit, M.P.S.I., to 42 Lower Mount Street, Dublin, 2; Joseph F. Butler, M.P.S.I., to P.O. Box 1900, Kitwe, Zambia, and Patrick T. Callanan, L.P.S.I., to 24 Grenville Gardens, Tyrwhitt Avenue, Rosebank, Johannesburg.

Members present were Messrs. T. R. Miller, R. J. Power, W. E. Boles, H. P. Corrigan, Miss L. Cuniffe, J. Gleeson, T. J. Hart, D. J. Kennelly, V. G. McElwee, J. B. Murphy, J. P. O'Donnell, G. C. O'Neill, T. B. O'Sullivan, R. J. Semple and M. F. Walsh.

A number of grants were passed for payment at a Benevolent Fund meeting that followed.

Preparation of Eye Drops

METHODS, APPARATUS AND CONTAINERS DESCRIBED

(Concluded from THE CHEMIST AND DRUGGIST, January 21, p. 65)

CONTINUING his address on January 11, Mr. G. SMITH outlined the properties that should be exhibited by an eye drop container.

Containers

Ideally, containers should be capable of being autoclaved, should protect the solution from contamination by micro-organisms during storage, should not reduce chemical stability of the solution, should be convenient for handling, should not leach out substances into the solution, and should not absorb or adsorb substances from the solution. The device for instilling the eye drops should facilitate the instillation of drops without the dropper touching the eyes.

Single-dose containers have many obvious advantages and are being used increasingly in hospitals especially in surgery. Containers known as "Minims" consist of a sterile disposable plastic applicator containing a sterile solution, enclosed in a sterile wrapper. They are manufactured under carefully controlled conditions, and are still expensive to produce.

Treatment of Teats

Rubber teats should be washed with a detergent, rinsed, boiled several times in water, and pre-treated by autoclaving with the particular bactericide (in double concentration). The teats are soaked in the solution for seven days to saturate the rubber and minimise absorption of bactericide afterwards. With eye drops containers, absorption is most likely during sterilisation, not in storage unless kept upside down. A practical problem is that benzalkonium chloride (a cationic detergent) removes additives such as stearic acid and zinc stearate, from the rubber, and some may still be removed even after two autoclavings in the pre-treatment. Usually, there is no sign of particles in the eye drops after autoclaving the solution in the final container, but some batches of rubber teats appear to contain unusually large amounts of those additives. Tests on rubber teats containing microcrystalline polythene as lubricant have shown the same deposit during pre-treatment. Silicone-rubber teats may be better where benzalkonium chloride gives trouble with the rubber. Alternatively, it has been suggested that the bottles should be closed with a screw-cap in which the liner is covered with a film of polyethylene terephthalate (Melinex). A separate screw-cap fitted with a teat and dropper (wrapped and sterilised) should be supplied to the patient or substituted, immediately before issue for use, for the ordinary screw-cap. Wherever possible, the closure on the bottle should be covered with a readily breakable seal (e.g. Viskring) before issue.

Plastic multi-dose containers are sometimes used by manufacturers, but their use in dispensing is fraught with hazards, possibly greater than those

encountered with rubber. First, the generic names applied to plastics, such as polythene, nylon, and polyvinylidene chloride apply to similar but not necessarily identical materials. Considerable variation may occur in physico-chemical properties and in the additives such as antioxidants, fillers, present in the material. Even two batches of the same "grade" of a plastic from the same manufacturer may vary in properties and in toxicity.

Supply and Use

Control in the ways in which the patient (or the nurse) stores and uses the dispensed eyedrops is difficult to achieve. Droppers may be left out and the solution contaminated. Bactericides which are effective in the cold should usually deal with vegetative micro-organisms which are accidentally introduced during use, but they cannot be relied up to kill bacterial spores. Contamination might be unusually heavy, and some organisms may develop resistance to the bactericide. In the B.P.C. Supplement, the following recommendations for supply and use are intended to minimise these dangers:

Supply:—1. For domiciliary use, not more than 20 mls to be supplied in each container. If more than one month's supply is dispensed at one time, the total volume should be distributed in an appropriate number of containers. 2. For hospital use, not more than 10 mls to be supplied.

Use:—1. When eye drops are dispensed for domiciliary use, a caution should be given to the user to avoid contamination during use and not to use the solution later than one month after first opening the container. 2. For eye drops used in hospital wards and out-patient departments, the solution should be discarded one week after first opening the container. 3. For eye-drops used in the operating theatre, a previously unopened container should be used for each patient.

Methods of Preparation

In preparing aqueous eyedrops, the first task is to prepare the vehicle containing the appropriate bactericide and to dissolve the drug in that vehicle. The solution is then clarified by filtration. For clarification, a sintered-glass No. 3 filter is commonly employed. Alternatively, a hard-surfaced filter paper, such as Whatman No. 54, may be used; the use of a softer paper can result in a filtrate that contains more particles than the original solution. Cotton wool is not recommended.

Because of the danger from pathogenic spore-forming organisms autoclaving is recommended to be used as the means of sterilisation in general or hospital practice, wherever possible. Autoclaves for small-scale sterilisation are commercially available.

For eye drops the B.P.C. allows "steaming" as an alternative method of sterilising. The method and apparatus

must ensure that the water is kept boiling and that an atmosphere of steam is maintained around the bottles being sterilised. If the lid is partly uncovered, the atmosphere above the water becomes a mixture of steam and air and the temperature may fall drastically. A simple steamer consists of a water-bath containing a wire basket upon which the bottles are placed; the lid should be loose fitting. An inexpensive steamer can be made by drilling a few holes in the inner vessel of a porringer. An electric boiling water steriliser (B.S. 2904:1957) is an example of a steamer specially designed for eye drops bottles, made by Jacob White & Co., Ltd., London.

When sterilisation by filtration is used there is always a risk that there may be an unexpected or undetected fault in the apparatus or technique used so that each batch of a preparation sterilised by filtration is required to be tested for sterility before it is issued for use. Sterilisation by filtration involves passing the solution through a bacteria-proof filter, aseptic distribution of the filtrate into sterilised containers, aseptic closure of the containers, and sterility tests. The process demands aseptic technique to prevent the access of micro-organisms.

Emergency Preparation

Pharmacists who do not have a special aseptic laboratory may still be called upon in an emergency to sterilise eye drops by filtration. In such emergencies, several precautions can be taken to minimise contamination. For example, a clean laboratory coat should be worn, the hands and the working surface should be swabbed with alcohol (70 per cent. w/w), and an aseptic screen should be employed. Skilled technique and quickness are important. In an emergency, eye drops dispensed without a sterility test having been performed, should be issued for use immediately after preparation; it has been suggested that the patient should be instructed not to use eye drops after about the fifth day.

Apparatus for preparing small quantities of sterile eye drops by filtration is readily available. The use of a filter-syringe made by R. B. Turner, Ltd., Church Lane, London, N.2, has been suggested. The filter-syringe (5 mls capacity) is composed of three parts: a metal plunger; a glass barrel with metal fittings; and a metal joint connecting the bottom of the barrel to the needle. Filtration is accomplished through a membrane filter (No. 1121, Membranfiltergesellschaft, Gottingen) held in place by means of a synthetic rubber washer and supported on a perforated metal plate. The filter pad, previously wetted with sterile water, is mounted in the syringe which is then wrapped in kraft paper and sterilised by autoclaving at 115°C. for thirty minutes; the plunger is wrapped separately and sterilised at the same time.

Other devices suitable for the small-scale filtration of eye drops include the Swinny hypodermic adaptor, micro-syringe filter holder, the Swinnox filter units (Millipore (U.K.), Ltd., Heron House, 109 Wembley Hill Road, Wembley, Middlesex). These polypropylene units are available presterilised (with filter) or non-sterile (without filter), with a filter diameter of 13 mm. or 25 mm. Two pore-size filters can be used, HA (0.45 micron) or GS (0.22 micron). Mechanical sieving is not the only means by which bacteria are removed from solutions by filtration, so that a filter of pore-size 0.45 micron may be satisfactory even for the very small pseudomonads which may be encountered. It is safer to use 0.22 micron size filters, although filtration is slower; clogging is minimised by the clarification previously carried out. Where a presterilised unit (wrapped in a plastic bag) is used, the end of the bag is cut off with sterilised scissors and the female Luer end of the unit is connected to a syringe previously filled with the solution. The bag is then removed aseptically, a sterile needle is attached to the other end of the unit, and the solution is filtered and passed aseptically into a previously sterilised container. Where a non-sterile unit is employed the top half of the unit is removed and inverted, a gasket is inserted in the well below the threads and the membrane filter placed on top of the gasket using forceps with unserrated tips. The bottom half of the unit is screwed on the top half and the assembled unit is wrapped in kraft paper and sterilised by autoclaving. The eye drops container is also wrapped in kraft paper and sterilised by autoclaving.

Great Scope for Pharmacists

Concluding his paper by outlining future developments, Mr. Smith said that despite the increasing use of single-dose containers, and the possibilities of sterilisation by irradiation it was likely that some eye drops would still be required to be dispensed extemporaneously in general practice. There was great scope for some pharmacists at least to manufacture in their pharmacies on a larger scale, with the opportunity to use their training to greater advantage.

Opening the discussion, Mr. B. D. TOLMAN, Portsmouth, asked why silicone was not specified in the British Standard for tests in view of its superiority over rubber. Mr. SMITH replied that the information had not been available when the Standard was prepared but a committee was engaged on a revision. Dr. I. MICHAELS, London, said that of the permitted bactericides, benzalkonium chloride was the one that could be used most frequently. He was "put off", however, by the speaker's reference to its incompatibility with droppers, though he had not experienced any cloudiness on heating with two or three types of bottle. Mr. SMITH said that additives were removed from some batches of eye drop bottles.

Mr. J. A. MYERS, Edinburgh, referred to the eye infections that had occurred in Birmingham and said the source of contamination appeared to

have been the bottles containing the eye solutions. He stressed that attention should be paid to bottle washing areas. Mr. Myers asked how cap liners should be treated to remove additives, saying he used washing in sodium carbonate. He was against autoclaving or steaming with droppers in place and believed in sealed bottles with an ample supply of sterile eye droppers. Mr. SMITH replied that for washing liners he had used sterile water after benzalkonium chloride. The practice of supplying sterile eye droppers was near to the ideal but impracticable where large numbers were concerned. PROFESSOR D. A. NORTON (chairman) pointed out that the procedure was permitted by the B.P.C. but might not be practicable under National Health Service economics.

Dr. R. C. KAYE, Leeds, warned against placing too much dependence on membrane filters. Mrs. M. WRIGHT, London, sought a bactericide for use in plain methylcellulose eye drops and was informed that phenylmercuric nitrate should be satisfactory though there were reports of bactericides form-

ing complexes with celluloses. Answering a suggestion that excess drug might be incorporated in eye drops to allow for breakdown, Mr. SMITH said that that was "fraught with troubles". Ideally it should be possible to calculate the amount of breakdown, but there was in practice too much variation between drug batches.

Returning to the Birmingham eye cases, Dr. T. D. WHITET, London, said the cause appeared to have been bad technique as the sterilised solution had been filled through a two-way syringe soaked in hydroxybenzoate solution. It was then used during operations. Mr. SMITH agreed that special care was needed pre- and post-operatively—eye solutions needed to be treated as injections in those circumstances. ANOTHER QUESTIONER declared that more thought should be given to pre-treatment of containers. About 85 per cent. of chlorocresol was lost into rubber and 90-95 per cent. of phenylmercuric salts was likewise lost in a few days. It was thus necessary to treat with four or five times the concentration to be used.

OVERSEAS NEWS

ARGENTINA

A New Pharmaceutical Plant

ELI Lilly & Co. of Argentina are erecting an extensive pharmaceutical plant at Ingeniero Maschwitz, a suburb about 40 miles north of Buenos Aires.

Manager Gains Award

THE Dr. William E. Upjohn prize for 1966 went to Senor Carlos Alberto Ventosa, general manager of Upjohn Anodia, S.A., Argentine. 8,000 candidates are understood to have competed for the prize which is awarded and presented at the Kalamazoo, Michigan, U.S.A., headquarters of the Upjohn organisation. Senor Ventosa was formerly one of the principals of the Franco-Inglesa pharmacy, Buenos Aires and acted as buyer for its wholesale department Anodia — now a separate company.

INDIA

Manufacture "in Public Sector"

THE committee on essential drugs constituted by the Ministry of Health, Government of India, has suggested the manufacture in the public sector of those drugs which are used in large quantities. The committee has also recommended that for essential drugs that have to be imported, a proper study should be made of the foreign exchange implications, the patents situation and data regarding cost of their manufacture in India. The committee felt that the co-operation of the medical profession should be fully enlisted in prescribing drugs by their generic names instead of by their trade names.

Pharmacy Week

INDIA'S health minister (Mrs. Purabi Mukherjee) gave an assurance of assistance and help for developing pharmaceutical units in West Bengal when she inaugurated the fifth National

Pharmacy Week in Calcutta recently. Dr. U. P. Basu emphasised the rôle of the pharmacist in modern society and said that West Bengal which had at one time been the pioneer of the industry in the country, was lagging behind States like Maharashtra, Andhra, Gujarat and Uttar Pradesh in the production of basic drugs. He felt that coal-based basic drugs had good possibilities in the State.

Drug Manufacture Projects

THE Indian Minister of Finance (Mr. Sachindra Chaudhuri) recently laid the foundation stone of a new Government-sponsored alkaloids factory at Neemuch. The factory is intended for the manufacture of alkaloids from raw opium. The minister said that opium alkaloids were indispensable in surgery and medicine and the proposed factory would not only help meet internal requirements for the drugs but would also earn foreign exchange. A Russian-aided synthetic drug project at Hyderabad, India, has been commissioned to produce phenacetin as the first of the sixteen drugs ultimately intended for manufacture there. Mr. R. R. Bahl (chairman and managing director, Indian Drugs and Pharmaceuticals, Ltd.), said that subsequent products, basic intermediates for sulpha and anti-tuberculosis drugs, would be commissioned in February-March. Thereafter, such drugs as sulphonamides, vitamins, anti-tuberculosis drugs etc. would be commissioned in a phased programme to be completed by the end of 1967.

WEST GERMANY

Chemical Workers' Pay Rise

AN industrial arbitration board on January 13 decided to raise the wages of about 200,000 West German chemical workers by 3.7 per cent. The chemical workers' union had originally demanded an 8.5 per cent. increase in wages.

TRADE REPORT

The prices given are those obtained by importers or manufacturers for bulk quantities or original packages. Various charges have to be added whereby values are in many instances augmented before wholesale dealers receive the goods into stock. Crude drugs and essential oils vary greatly in quality and higher prices are charged for selected qualities.

LONDON, JANUARY 25: There were few important developments in the CRUDE DRUGS market during the week and prices were mainly repeated.

Cape ALOES were cheaper by 5s. per cwt. but the CURAÇAO variety was dearer by the same margin on spot following withdrawal of offers from origin. Kobe No. 1 AGAR was also said to be cleared on the spot. After a temporary absence shipment offers were again received for Ceylon CINNAMON QUILLS and among GINGERS for Nigerian split which was quoted at 80s., c.i.f. or 10s. dearer than spot material. STROPHANTHUS KOMBE which has been unobtainable for several months was offered on the spot at 40s. per lb. TURMERIC was a dull market and holders shaded their prices no doubt under the influence of the approaching new crop. Indian VALERIAN ROOT was marked down 10s. cwt. in both positions, while SENEGA was dearer by 1s. 6d. per lb.

In ESSENTIAL OILS Chinese ANISE was difficult to find on the spot and shipment quotations rose sixpence per lb. PALMA-ROSA although nominal for shipment, was unchanged on the spot at 140s. per lb.

OLIVE OIL prices remain fairly steady with Spain apparently the only country having stocks for export.

Among PHARMACEUTICAL CHEMICALS, higher raw material costs were said to be the reason for slightly higher prices for PHTHALYL and SUCCINYL SULPHATHIAZOLES.

Pharmaceutical Chemicals

AMMONIUM ACETATE. — Kegs (70 kilos), B.P.C. 1949, 8s. 1d. per kilo. SOLUTION (200-kilo drums) strong, 3s. 6d. per kilo.

AMMONIUM BICARBONATE.—B.P. powder £54 10s. per ton; CARBONATE, £83 10s. for lump and £87 10s. for powder. All in 1-cwt. free kegs.

AMMONIUM CHLORIDE.—50-kilo lots pure powder, 2s. 5½d. per kilo in paper sacks.

AMMONIUM SULPHATE. — 50-kilo lots, 2s. 4½d. per kilo for B.P.C. 1934 grade.

AMPHETAMINE.—BASE, 150s. per kilo in 5-kilo lots, SULPHATE, 120s.; DEXAMPHETAMINE, 270s. per kilo for 10 kilos.

AMYLOBARBITONE.—B.P.C. is 63s. per kilo for less than 100-kilo lots. SODIUM is 10s. per kilo more.

BACITRACIN.—Sterile topical, 53s. per m.u. for 25 m.u. lots.

BARIUM SULPHATE.—B.P. 50-kilo lots, 3s. 8d. to 3s. 9½d. as to package; 250-kilos from 3s. 3½d. to 3s. 5d.

BEMEGRIDE.—B.P.C. is 320s. per kilo.

BUTOBARBITONE.—B.P.C. 77s. 6d. per kilo for 25-kilo lots and over.

COCAINE.—35-oz. lots HYDROCHLORIDE, 105s. per oz., ALKALOID, 115s. per oz. Subject to D.D.A. Regulations.

CYCLOBARBITONE.—Under 25 kilos; 70s. per kilo. CALCIUM, 70s. per kilo.

DITHRANOL.—B.P. offered at 6s. 9d. per oz. for 7-lb. lots.

DOMIPHEN BROMIDE.—B.P.C. grade, 32s. per lb. in 1-cwt. lots.

ETHER.—Per lb. in winchesters; B.P. TECHNICAL, B.S.S., 5-cwt. 2s. 9d.; (4s. 4d. per litre). In drums the price is 2s. 1d. per lb. ANAESTHETIC, B.P., 6-cwt., 3s. 11½d.; 10-cwt., 3s. 7½d.

GLYCEROPHOSPHATES.—Per kilo in 50 kilo lots; CALCIUM, B.P.C., 28s. 2d.; IRON, 33s. 7d.; MANGANESE, N.F.X., 49s. 7d.; POTASSIUM, 50 per cent., B.P.C., 8s. 6d.; SODIUM, 50 per cent., B.P.C., 5s. 11d. and powder, B.P.C., 1949, 18s. 8d.; GLYCEROPHOSPHORIC ACID, 200 per cent., 10s. 8d.

HEXOBARBITONE.—25-kilo lots or over, 115s. per kilo.

HOMATROPINE.—16-oz. lots (per oz.); ALKALOID, 30s. 6d.; HYDROBROMIDE 24s. 6d.; HYDROCHLORIDE, 28s. 6d.; METHYLBROMIDE, 25s. 6d.

HYDROGEN PEROXIDE.—For 27.5 per cent. by weight, £115 per ton; 35 per cent., £138.

HYDROQUINONE.—1-cwt. lots, 10s. per lb.; 1-ton, 8s. 6d.

HYOSCINE HYDROBROMIDE. — Per kilo, 3,418s. 10d.; METHYL BROMIDE, 3,589s. 9d.

METHADONE HYDROCHLORIDE.—Subject to D.D.A. Regulations. 2s. 6d. per gm. for 100-gm. lots.

METHYL PHENOBARBITONE.—B.P.C., is 67s. per kilo for under 50-kilo lots.

NARCOTINE. — ALKALOID and HYDROCHLORIDE, 399s. 6d. kilo.

NEOMYCIN. — SULPHATE, B.P., 590s. per kilo; 5-kilos, 550s. per kilo.

OESTRADIOL.—MONOBENZOATE, 14s. 6d. per gm.

OPIATES.—Home trade prices (per kilo) subject to D.D.A. Regulations.

	1 kilo and over		Under 1 kilo	
	s.	d.	s.	d.
CODEINE				
ALKALOID ...	1,093	0	1,939	0
HYDROCHLORIDE ...	1,665	0	1,701	0
PHOSPHATE ...	1,445	0	1,480	0
SULPHATE ...	1,665	0	1,701	0
MORPHINE				
ACETATE ...	1,762	0	1,798	0
ALKALOID ...	2,159	0	2,194	0
HYDROCHLORIDE ...	1,762	0	1,798	0
SULPHATE ...	1,762	0	1,798	0
TARTRATE ...	2,115	0	2,150	0
ETHYLMORPHINE				
ALKALOID ...	2,229	0	2,265	0
HYDROCHLORIDE ...	1,903	0	1,939	0
DIAMORPHINE				
ALKALOID ...	2,105	0	2,141	0
HYDROCHLORIDE ...	1,930	0	1,965	0

PARAFFINS.—Prices to wholesaler distributors per gal. delivered in drums.—Liquid HEAVY B.P., 8s. 7½d. for over 5-drum lots; 5 drums and under, 8s. 8½d. LIGHT B.P., 7s. 0½d. and 7s. 1½d. for same quantities. Technical white; LIGHT, 6s. 5d. and 6s. 6d.; MEDIUM, 7s. 6d. and 7s. 7d. All subject to 0.2d. per gall. Government surcharge. Drums charged and returnable. Soft: Best grades WHITE medium consistency, £116 15s. per ton and soft consistency, £113 7s. 6d.; YELLOW, £94 10s. Other B.P. grades at £95, £100 10s., £106 per ton for white and at £74 17s. 6d. for yellow. All in non-returnable drums delivered.

PENICILLIN.—SODIUM, POTASSIUM or PROCaine, 2.25d. per mega for 5,000 megas.

PENTOBARBITONE.—Less than 100-kilo lots are 85s. 6d. per kilo for ACID and 90s. 6d. for SODIUM.

PETHIDINE HYDROCHLORIDE.—Subject to D.D.A. Regulations, 5-kilo lots, 300s. per kilo.

PHENACETIN.—B.P. 1-ton lots, 6s. 3d. per lb.; 1-cwt., 6s. 9d.

PHENOBARBITONE.—Spot rates 50-kilo lots, 47s. 6d. per kilo. SODIUM SALT, 54s. 6d.

PHOLCODINE.—8-oz. lots, 91s. 6d. per oz. (3,227s. per kilo).

PHTHALYSULPHATHIAZOLE. — 5-kilo lots, 32s. 6d. per kilo; 50-kilos, 31s. 6d. kilo.

PHENAZONE.—Imported, 9s. 6d. per lb.

PHENOLPHTHALEIN.—1-cwt. 9s. per lb.

PILOCARPINE.—1-kilo lots, NITRATE, 1,357s. per kilo; HYDROCHLORIDE, 1,516s.

STREPTOMYCIN. — BASE and SULPHATE, 2.85d. per gm.

STRYCHNINE.—100-oz. lots ALKALOID, 7s. per oz. SULPHATE and HYDROCHLORIDE, 6s.

SUCCINYL SULPHATHIAZOLE.—5-kilo lots, 38s. 6d. per kilo; 50-kilos, 37s. 6d. kilo.

SULPHACETAMIDE.—50-kilo lots, 54s. per kilo; SODIUM, 55s.

SULPHADIAZINE.—5-kilo lots, 48s. 5d. per kilo; 50-kilo lots, 43s.

SULPHADIMIDINE.—50-kilo lots are 29s. per kilo.

SULPHAGUANIDINE.—100-kilo lots, about 19s. 6d. per kilo.

SULPHAMERAZINE.—In 50-kilo lots, 37s. 6d. per kilo.

SULPHAMETHIAZOLE.—Per kilo, 5-kilo lots, 100s.; 50-kilos, 95s.

SULPHANILAMIDE.—50-kilo lots, 13s. 1d. per kilo.

SULPHAPYRIDINE.—5-kilo lots, 120s. per kilo.

SULPHATHIAZOLE.—100 kilos, 32s. per kilo; 50 kilos, 33s.

Ethyl Alcohol

FERMENTATION grades in tank wagon lots per proof gall.:—ETHYL ALCOHOL: (95 per cent. Gay LUSSAC, 66 overproof): where the minimum delivery is 2,500 bulk gall. or over, 3s. 7d.; 1,500, 3s. 8d.; 500, 3s. 9d. SYNTHETIC grades (supplied only to buyers authorised by Customs and Excise to buy duty free) 95 per cent., from 2s. 10d. to 3s. 0d.; 99.5 per cent., 3s. 1d. to 3s. 3d. bulk deliveries. All excluding duty.

ABSOLUTE ALCOHOL, 95.5 per cent., 74.5 o.p., from 3s. 11d. to 4s. 1d. for same quantities: the special high strength (99.9 per cent., 75.2 o.p.), from 4s. 3d. to 4s. 8d. (in drums) for 1,000 40-gall. lots. DOUBLY RECTIFIED ALCOHOL (S.V.R.), 95.8 per cent., 68 o.p., from 3s. 9d. to 3s. 11d. R.R. ABSOLUTE ALCOHOL (re-rectified), 99.7 per cent., 75 o.p., 8s. in 40-gal. drums).

Methylated Spirit

METHYLATORS' rates per bulk gall. in Great Britain are as follows:

INDUSTRIAL METHYLATED SPIRIT: Strength 61 o.p., 500 gall. and over 5s. 1d.; 100 gall. and under 500 gall., 5s. 6d.; 40 gall. and under 100 gall., 5s. 11½d.; 10 gall. and under 40 gall., 6s. 5½d.; 5 gall. and under 10 gall., 6s. 11½d. Strength 64 o.p., halfpenny per gall. more than the above rates: 66 o.p. (B.P.), one penny more: 68 o.p., 3½d. more with 74 o.p. at 5s. 10½d.; 6s. 3½d.; 6s. 9d.; 7s. 3d. and 7s. 9d. for similar quantities. Tank wagon delivery is 2d. per gall. off list price—minimum 500 galls. For industrial methylated spirit of perfumery grade, prices are from 6s. 6d. (tank wagon) for 500 gall. to 8s. 0½d. (10-gall. drums) for 64 o.p.

MINERALISED METHYLATED SPIRIT: Strength 64 o.p. in one delivery 500 gall. upwards. 5s. 5½d. in drums; 100 gall. and under 500 gall., 5s. 10½d.; 40 gall. and under 100 gall., 6s. 4d.

PYRIDINISED INDUSTRIAL METHYLATED SPIRIT: Strength 66 o.p., 500 gall., tank wagon delivery, 5s. 3½d.; 500 gall. in 40-gall. drums, 5s. 5½d.; 100 gall. and under 500 gall. (in drums), 5s. 10½d.; 40 gall. and under 100 gall., 6s. 4d.; 10 gall. and under 40 gall., 6s. 10d.; 5 gall. and under 10 gall., 7s. 4d.

Crude Drugs

AGAR.—Kobe No. 1 for shipment, 22s. 3d., c.i.f.; spot cleared.

ALOE.—(Per cwt.). Cape primes, spot, 230s.; shipment, 220s., c.i.f. and Curacao, 400s. spot nominal; shipment, no offers.

CAMPHOR.—B.P. powder for shipment, 4s. 4½d. per lb., c.i.f.; spot, 5s.

CARDAMOMS.—(per lb.). Alleppy greens 21s. 6d., spot; shipment 17s., c.i.f. Prime seed, spot, 33s. 6d.; shipment, 31s., c.i.f.

CASCARA.—Spot, 245s. per cwt.; shipment, new peel offered at 245s., c.i.f.

CASSIA.—*Lignea*, whole for shipment, no offers; spot, 360s. per cwt., duty paid.

CHAMOMILE.—Belgian flowers, 15s. to 16s. per lb., spot; German type, 7s. 6d.

CHERRY BARK.—Thin natural, on spot from 3s. per lb.; shipment 2s. 9d., c.i.f.

CINNAMON.—BARK, Seychelles, 135s. cwt. spot; shipment, 107s. 6d., c.i.f.; Ceylon, QUILLS for shipment, 5 0's, 10s. 6d., 2 0's 9s. 5½d., seconds, 8s. 5½d., quillings, 5s. 5d. lb., all c.i.f.

COCILLANA.—Bark, 2s. 10d. per lb., on the spot.

COLOCYNTH PULP.—Spot, 3s. 10d. per lb.; shipment, 3s. 9d.

CUBES.—Spot quoted at 285s. cwt.

DANDELION.—Root is 165s. per cwt., spot, shipment, 160s., c.i.f.

DRAGONS BLOOD.—Aden, spot offered at £25 cwt.

ERGOT.—Portuguese—Spanish, spot, 11s. per lb.; shipment, 10s. 6d. c.i.f., nominal, Continental, 9s., spot.

GENTIAN.—Root is firm at 215s. per cwt., spot, and 210s., c.i.f.

GINGER.—(Per cwt.). Nigerian split, 70s., spot; c.i.f. 80s., c.i.f.; peeled, 160s., spot, shipment, 140s., c.i.f. African, spot, 220s., Jamaican No. 3, spot, 260s., shipment, not offering; Cochinchina, spot, 200s.; shipment, new-crop, 160s., c.i.f.

GUM ACACIA.—Kordofan cleaned sorts, 187s. 6d. per cwt., spot; shipment, 165s., c.i.f.

HONEY.—(Per cwt., c.i.f.). Australian light amber, spot, 115s. to 120s.; and medium amber, 105s. to 110s. Argentine, 85s. to 90s.; Canadian, 170s. to 175s.; Mexican, 105s. to 110s.

HYDRASTIS.—Spot is 35s. per lb. No shipment offers.

IPECACUANHA.—Matto Grosso for shipment, 51s. 6d. per lb., c.i.f., spot, 54s. 6d. Costa Rican, 60s., spot; forward 56s., c.i.f. Colombian, spot, 52s. shipment, 50s., c.i.f.

JALAP.—Mexican whole bulbs, 3s. 9d. per lb. on spot; shipment, 3s. 6d., c.i.f. Brazilian, 1s. 9d., c.i.f.; spot, 1s. 11d.

KARAYA.—No. 1 f.a.q. gum, spot, 415s.; No. 2, 300s. per cwt.

KOLA NUTS.—West African halves are 7½d. per lb. on the spot; shipment, 7d. c.i.f.

LANOLIN.—ANHYDROUS, B.P. is from 2s. 2½d. to 2s. 6d. per lb. in 1-ton lots delivered free drums. Commercial grades from 1s. 4½d. and cosmetic, 2s. 8d.

LEMON PEEL.—Spot, 1s. 9d. per lb.; partially extracted, 1s.

LIME FLOWERS.—Spot 2s. 2d. per lb.

LIQUORICE.—ROOT, Russian, 67s. 6d. per cwt.; Anatolian, 57s. 6d.; Anatolian decorticated, 170s. BLOCK JUICE: Anatolian, 210s. to 220s. per cwt.; Italian, 193s.; sticks from 244s. to 460s. per cwt.

LOBELIA.—Dutch on the spot, 4s. 6d. per lb.; shipment, 4s. 3d. c.i.f. American, 12s. per lb. spot and 11s., c.i.f.

LYCOPodium.—Indian triple-sifted, 8s. 6d. per lb., spot.

MENTHOL.—(Per lb.). Chinese shipment, 29s. 3d., c.i.f.; spot, 35s., duty paid, Brazilian for shipment, 29s., c.i.f.; spot, 34s., duty paid.

MERCURY.—Spot, £175 per flask of 76 lb., ex warehouse.

MYRRH.—Spot is 395 cwt.

NUTMEGS.—(Per lb.). West Indian, spot defectives 5s. 3d.; sound unsorted, 7s. 6d., spot; 80s., 12s., East Indian for shipment, b.w.p., 3s. 8d., c.i.f.; 110's, 9s., c.i.f., 80's, 10s., c.i.f.

NUX VOMICA.—Cochin, 110s. per cwt. on the spot; shipment, 80s., c.i.f.

OLIBANUM.—Spot is from 195s. to 250s. cwt. as to grade.

ORANGE PEEL.—Spot: Sweet ribbon, 1s. 8d. per lb., bitter quarters: West Indian, 10½d.; Spanish, 4s. 9d.

PEPPER.—White Sarawak, 3s. 7d. per lb. spot; shipment, 3s. 2½d., c.i.f. Black Sarawak, 2s. 8d. spot; shipment, 2s. 5½d., c.i.f. Black Malabar, 290s. per cwt. c.i.f. Brazilian black No. 1, 2s. 11d. lb. duty paid.

PIMENTO.—Jamaican allocation at 740s. per cwt., c.i.f., delivered weights.

PODOPHYLLUM.—*Emodi* 200s., per cwt. spot; shipment, 175s., c.i.f.

QUILLAIA.—Spot is offered at 175s. per cwt. and shipment at 160s., c.i.f.

RHUBARB.—Various grades offered at from 12s. to 30s. per lb. spot.

SAFFRON.—Mancha superior, spot, 850s. per lb.; Rio, 780s.

SARSAPARILLA.—Jamaican native red, spot, 4s. 3d. per lb.; shipment, 3s. 7d., c.i.f.

SEEDS.—(Per cwt.) — ANISE.—Cyprian, 225s.; Spanish, 250s., duty paid. CARAWAY.—Dutch, 157s. 6d., spot. CELERY.—Indian, 135s. to 150s. spot; shipment, 137s. 6d., c.i.f. CORIANDER.—Moroccan, 115s. Rumanian whole, 125s. and splits, 110s., all duty paid; shipment, Moroccan, 100s.; Rumanian splits, 80s., c.i.f. afloat. CUMIN.—Spot, Cyprian, 265s.; Indian, 260s.; Iranian, 240s., duty paid. DILL.—Indian is nominal at 115s., spot; shipment, 87s. 6d., c.i.f., quoted. FENNEL.—Chinese, 130s., duty paid; Indian, 140s.; shipment, Chinese, 110s., c.i.f.; Indian, 130s., c.i.f. FENUGREEK.—Moroccan, 80s., duty paid; shipment, 67s. 6d., c.i.f. MUSTARD.—English, 70s. to 85s., according to quality.

SENEGA.—Spot, 34s. per lb.; shipment, 34s., c.i.f., nominal.

SENNA.—(Per lb.) Tinnevely LEAVES, spot; Prime No. 1, 2s. 3d.; No. 3, f.a.q., 1s. 3d. Shipment; No. 3, 1s. 1d., c.i.f. PODS Tinnevely hand-picked quoted from 2s. 2d. to 2s. 4½d.; manufacturing, 1s. 3d., shipment, 1s. 2d., c.i.f. Alexandria PODS: Hand-picked spot, 5s. to 7s.; manufacturing, forward, 1s. 11d., c.i.f.; spot, 2s. 6d.

SLIPPERY ELM BARK.—Spot offered at 3s. 9d. per lb.

SQUILL.—Italian, spot, 135s. per cwt.; shipment, 120s., c.i.f.

STRAMONIUM.—Continental LEAVES, 85s. per cwt., spot.

STROPHANTHUS.—*Kombe*, spot 40s. lb., nominal.

STYRAX.—Spot, 24s. per lb.; shipment, 24s., c.i.f.

TONQUIN BEANS.—Para, spot, cleared; shipment, no offers.

TRAGACANTH.—Ribbon, No. 1, £220 to £225 per cwt.; No. 2, £190 to £205.

TURMERIC.—Madras finger, 95s. per cwt., spot; shipment, 82s. 6d. to 85s., c.i.f., as to crop.

VALERIAN ROOT.—Indian, spot, 235s., per cwt.; shipment, 225s., c.i.f. Continental root, 520s., spot; shipment, 475s., c.i.f.

VANILLIN.—(Per lb.), 5-cwt. lots 21s. 6d.; 1-cwt., 21s. 9d.; 56-lb., 22s.; small quantities, 22s. 6d.

WAXES.—(Per cwt.). BEES'—Most sources nominal. CANDELLILLA, spot, 465s.; forward, 460s., nominal. CARNAUBA, fatty grey, spot, 265s.; shipment, 260s., c.i.f.; prime yellow spot, 430s.; shipment, 395s., c.i.f.

Essential and Expressed Oils

ANISE.—Chinese, spot, nominal shipments, 9s. 9d., c.i.f.

BUCHU.—Spot, from 370s. to 400s. per lb.

CADE.—Spanish from 2s. per lb. for drum lots.

CAJUPUT.—Spot from 10s. 6d. to 14s. per lb.

CALAMUS.—Spot from 55s. to 60s. per lb.

CAMPHOR, WHITE.—Chinese for shipment, 4s. 2d., c.i.f., per kilo; spot 2s. 6d. lb., duty paid.

CANANGA.—Spot from 32s. 6d. per lb.

CARDAMOM.—Imported, 610s. per lb.; English distilled, 1,000s.

CASSIA.—Spot from 30s. to 35s. per lb. for 80-85 per cent.

CASTOR.—Home produced B.P. oil, spot, £140 per ton naked ex mill (2-ton lots).

CEDARWOOD.—American from 7s. 6d. per lb. on the spot; East African, 8s. 6d.

CELERY SEED.—Indian, 100s. per lb.; English, 200s.

CHENOPODIUM.—From 38s. per lb.

CINNAMON.—English-distilled, 75s. per oz.; other B.P. oils from 22s. to 130s. per lb. Ceylon leaf, 23s.; Seychelles leaf rectified from 9s. 9d., spot.

CITRONELLA.—Ceylon spot 4s. per lb.; shipment, 3s. 8d., c.i.f.; Formosan 4s. 3d. in bond and 4s. 10½d. c.i.f.; Chinese 3s. 9d. in bond; 3s. 7½d. c.i.f.

CLOVE.—Madagascar leaf for shipment, 6s. 4½d., c.i.f., spot, 6s. 9d., in bond. Rectified, 10s. Distilled bud oil, ENGLISH, B.P., 26s. per lb., for 1-cwt. lots.

COD-LIVER.—B.P. in 45-gal. drums is 12s. per gall, plus 30s. deposit on drum. Veterinary is from 9s. 10d. per gall. 25-stone lots. Delivered terms.

CORIANDER.—From 40s. per lb. spot.

CUBEB.—Spot supplies of English are 90s. per lb.

CUMIN.—English distilled oil, 120s. per lb. imported 90s. to 100s.

DILL.—Imported from 36s. per lb., spot.

LIME.—West Indian distilled, 73s.-74s. per lb. on the spot.

NUTMEG.—East Indian B.P. oil is about 73s. per lb. English distilled, 110s.

OLIVE.—For shipment: Spanish, £240 to £250 per metric ton, f.o.b. Spanish port. Other sources nominal. Spot, £295 to £305 per long ton, in drums, ex wharf.

ORANGE.—Cold-pressed sweet oil, 4s. 0d. to 6s. per lb.; Spanish, 20s.; Sicilian bitter, 65s.

PALMAROSA.—Shipment, nominal; spot, 140s. per kilo.

PEPPERMINT.—(Per lb.). *Arvensis*: Chinese for shipment, 10s., c.i.f.; spot, 10s. 3d. Brazilian for shipment, 9s. 9d., c.i.f.; spot, 10s. *Piperita*: Italian spot, 75s.; forward shipment, 82s. 6d. American from 36s. to 56s., as to source.

PETITGRAIN.—Paraguay for shipment, 15s. 3d., c.i.f.; spot, 16s. 3d. per lb.

PINE.—*Pumilionis*, 20s. per lb., *sylvestris*, 8s.; *abietis*, 14s.

ROSEMARY.—Spanish, 12s. per lb., duty paid.

UNITED STATES REPORT

NEW YORK, JANUARY 24. The market for QUININE and QUINIDINE was clouded by lower-priced offerings from Europe. HYDRASTIS gained 15 cents per lb. to \$3.25, and WITCHHAZEL LEAVES were lifted 5 cents to 70 cents a lb. on moderate demand. Formosan CITRONELLA rose two cents to 74 cents per lb. CORIANDER at \$5.85 was down 30 cents lb. and LAVENDER SPIKE at \$3.25, down 10 cents.

TRADE MARKS

APPLICATIONS ADVERTISED BEFORE REGISTRATION

"Trade Marks Journal," January 11, No. 4611

For hand creams, face creams and powder for application to the skin of babies, all being medicated (5)

Device with letter A, 870,436, by Harry S. Allen, Ltd., Sheffield, 9.

For medicinal and pharmaceutical preparations and substances for use in the relief of pain and nervous tension; muscle relaxants and tranquilizers (5)

SOLACEN, 887,216, by Carter-Wallace, Inc., New York, U.S.A.

For pharmaceutical preparations and substances (5)

COLINIC, B893,487, by A. Wander, Ltd., London, W.1.

For pharmaceutical and veterinary preparations and substances, all in capsule form, for the treatment of lipid conditions and diseases (5)

LIPOCAPS, B895,062, by Lewis Laboratories, Leeds 9.

For medicated creams for the treatment of the skin (5)

HARACIN, 895,295, by Roberts Windsor, Ltd., London, W.1.

For veterinary preparations and substances (5)

VOREN, 897,203, by Cela Landwirtschaftliche Chemik-Alien, G.m.b.H., Ingelheim on Rhine, Germany.

For pharmaceutical, veterinary and sanitary substances; infants' and invalids' foods; material prepared for bandaging; disinfectants; deodorants and insecticides; all for sale in the United Kingdom otherwise than for export (5)

Device, 896, 716, by Reckitt & Sons, Ltd., Hull, Yorks.

For vaccines for use in the treatment of allergic conditions in humans (5)

ALAVAC D, ALAVAC P, 897,716-17, by Beecham Group, Ltd., Brentford, Middlesex.

For tubing for use in surgery (10)

REDIDRAIN, B893,082, by William Warno & Co., Ltd., Barking, Essex.

For bags for toilet and cosmetic articles (18)

Device with words BETTY LOU SIAMESE TWINS, 898,387, by A. J. Siris Products, Ltd., Lanchester, co. Durham.

For small domestic utensils (not of precious metal or coated therewith); combs, sponges etc. (21)

TEFAL BIS, 890,354, by S.A. Tefal, Sarcelles, France.

"Trade Marks Journal," January 18, No. 4612

For fertilisers containing nitrogen (1)

NITRACC, 893,389, by A.C.C. (Fertilisers), Ltd., Harrogate, Yorks.

For chemical preparations and substances for use in industry (1)

ALBACAR, ALBAGLOSS, 894,909-10, by Chas. Pfizer & Co., Inc., New York, U.S.A.

For chemical preparations and substances, all being esters or containing esters and for use in industry (1)

EMESTER, 894,911, by Chas. Pfizer & Co., Inc., New York, U.S.A.

For perfumes; essential oils, cosmetics, hair lotions, dentifrices, soaps, and non-medicated toilet preparations (3)

Device with words SA POCETI GUERLAIN L'HEURE BLEUE, 887,002, by Guerlain, Ltd., Perivale, Greenford, Middlesex.

For perfumes, non-medicated toilet preparations, cosmetic preparations, dentifrices, depilatory preparations, toilet articles, sachets for use in waving the hair, shampoos, soaps and essential oils (3)

SCHEHEREZADE, 895,251, by Madame Thamar, Ltd., London, S.W.3.

For perfumes, eau de Cologne, cosmetic preparations, dentifrices, non-medicated toilet preparations, toilet articles, soaps and essential oils (3)

STRICT, B895,751, by Romney Cosmetics, Ltd., Sandwich, Kent.

For perfumes, soaps, non-medicated toilet preparations, cosmetic preparations, preparations for the hair (3)

DRIFTWOOD, 898,014, by United Pharmaceutical Industries, South Yarra, Victoria, Australia.

For detergents (not for use in industrial or manufacturing processes) (3)

BENZAKO, 893,886, by Henry Heaton & Co., Ltd., Bradford, 5, Yorks.

For non-medicated toilet preparations for hardening, manicuring and polishing nails (3)

TE-LONG, 896,835, by Martal Cosmetics, Ltd., London, W.C.1.

For non-medicated toilet preparations, cosmetic preparations; soaps, perfumes and essential oils (3) and for pharmaceutical preparations and substances (5)

ACTISOL, 891,988, 891,986, by Laboratoire Lachartre, Paris, 12, France.

For preparations for cleaning dentures; dentifrices (3) and for adhesives for securing artificial dentures (5)

NICODYNE, 893,838-39, by Stafford-Miller, Ltd., Hatfield, Herts.

For antibiotics and antibiotic preparations (5)

CARMYCIN, 883,234, by Carlton Laboratories (Southern), Ltd., Lancing, Sussex.

For vaccines for the treatment of distemper in foxes and minks (5)

MINOVAX, 886,457, by Behringwerke, A.G., Marburg/Lahn, Germany.

For medical and surgical plasters, bandages, sanitary towels and sanitary tampons (5)

TEFSTAR, 886,673, by Vereinigte Papierwerke Schickedanz & Co., Nuremberg, Germany.

For pharmaceutical and veterinary preparations and substances, all for use in connection with human and animal secretions, extracts and cell material to be subjected to gelation (5)

MELOGEL, 890,479, by Twyford Laboratories, Ltd., London, N.W.10.

For medical and surgical plasters, materials prepared for bandaging, self-adhesive tapes for medical and surgical use and surgical dressings (5)

NOPI, 891,632, by Nopitape, Ltd., Huntingdon.

For gynaecological preparations (5)

OVIRAN, 892,554, by American Home Products Corp., New York, U.S.A.

For dietetic foods and infants' and invalids' foods, all in biscuit form and all containing honey (5)

SIMBIX HONEYBROWNS, B892,589, by Britanol, Ltd., Horsforth, Leeds, Yorks.

For medicinal and pharmaceutical preparations (5)

KENSORB, 893,098, by E. R. Squibb & Sons, Ltd., Twickenham, Middlesex.

For aphicides (5)

ATLASETOX, 896,444, by Atlas Preservative Co., Ltd., Erith, Kent.

For pharmaceutical, veterinary and sanitary substances; medical and surgical plasters; material prepared for bandaging; disinfectants; preparations for killing weeds and destroying vermin (5)

PERSUMBRAN, 896,950, by C. H. Boehringer Sohn, Ingelheim-on-Rhine, Germany.

For vaccines for use in the treatment of allergic conditions in humans (5)

ALAVAC S, 897,718, by Beecham Group, Ltd., Brentford, Middlesex.

For pharmaceutical and veterinary preparations (5)

SISOTEK, 899,258, by Willows Francis, Ltd., London, E.8. and Epsom, Surrey.

For medicines for human beings and animals (5)

DIGISYNTH, 899,760, by Farbenfabriken Bayer, A.G., Leverkusen-Bayerwerk, Germany.

For pharmaceutical preparations and substances for human and veterinary use (5)

TREMASYD, 900,030, by Parke, Davis & Co., Detroit, 32, Michigan, U.S.A. and Hounslow, Middlesex.

For pharmaceutical preparations and substances (5)

CYKLOKAPRON, 900,076, by A.B. Kabi, Stockholm, Sweden.

For pharmaceutical preparations and substances for veterinary use (5)

NU-MINEL, 900,079, by Imperial Chemical Industries, Ltd., London, S.W.1.

For surgical instruments (10)

ARMOVEN, 896,196, by Armour Pharmaceutical Co., Ltd., Eastbourne, Sussex.

For pharmaceutical preparations and substances for use in making seltzer water (5) and for non-medicated seltzer water and preparations for making seltzer water (32)

DIGER SELZ, 894,202-03, by Istituto Chimico Eurosud, S.p.A., Rome, Italy.

For hair dryers (not being machines), etc. (10)

SONA, 897,624, by N. C. Joseph, Ltd., Stratford-on-Avon, Warwickshire.

For toilet utensils; containers adapted to dispense their contents in aerosol form; sponges and cloths for cleaning purposes; all for personal female use (21)

FEMFRESH, B888,125, by Green, Young & Co., Ltd., London, W.1.

For diapers for babies (25)

REDI-FOL, B892,210, by Johnson & Johnson, New Brunswick, New Jersey, U.S.A.

PATENTS

COMPLETE SPECIFICATIONS ACCEPTED

From the "Official Journal (Patents),"

January 4

Pill dispensers. Ortho Pharmaceutical Corporation. 1,058,992.

Preparation of ethylene glycol acetates. E.I. Du Pont de Nemours & Co. 1,058,995.

Substitute saccharins. Harshaw Chemical Co. 1,059,003.

Urea derivatives. Imperial Chemical Industries, Ltd. 1,059,034.

Toilet soap composition. Procter & Gamble, Ltd. 1,059,089.

Interferential vaccines. Soc. Industrielle pour la fabrication des Antibiotiques. 1,059,095.

Benzodiazepine derivatives. American Home Products Corporation. 1,059,107.

Polymeric quaternary ammonium salts. Procter & Gamble Co. 1,059,117.

Preparation of alpha-tocopheryl quinone. Sun Oil Co. 1,059,155.

Heterocyclic compounds which have pharmacodynamic activity and/or which are intermediates in the preparation of products having pharmacodynamic activity. American Home Products Corporation. 1,059,175.

Dibenzodiazepine derivatives and the manufacture thereof. Upjohn Co. 1,059,182-83.

Heat-treated photographic emulsions and their use. Kodak, Ltd. 1,059,184.

Substituted cyclohexylamine. Abbott Laboratories. 1,059,196.

Coatings for rectal and vaginal capsules and process for their manufacture. CIBA, Ltd. 1,059,210.

Photographic silver halide emulsions. Eastman Kodak Co. 1,059,214.

Therapeutic products. A. Samy. 1,059,230.

Photographic materials. Eastman Kodak Co. 1,059,248.

Method for packaging, mixing and dispensing of plurality of substances. Laboratories Chibret. 1,059,265.

Quinazaline-2, 4-diones and pharmaceutical compositions thereof. Imperial Chemical Industries, Ltd. 1,059,271.

Pesticidal compositions. CIBA, Ltd. 1,059,276.

Penicillins. Beecham Group, Ltd. 1,059,303.

Reactions and intermediates of use in synthesis of compounds of the 2-dehydroemetine series. Glaxo Laboratories, Ltd. 1,059,326.

Basically substituted esters of cycloalkanol carboxylic acids. Biochemie, G.m.b.H. 1,059,347-49.

Process for the preparation of 4'-nitrodiophenyl-4-carboxylic acid. CIBA, Ltd. 1,059,350.

Process for stabilising natural keratin fibres. Thiokol Chemical Corporation. 1,058,800.

British patent specifications relating to the above will be obtainable (price 4s. 6d. each) from the Patents Office, 23 Southampton Buildings, Chancery Lane, London, W.C.2, from February 15.

From the "Official Journal (Patents),"

January 11

Process for the production of trimethylene-1,3, 5-trisulphone. Chemische Werke Huls, A.G. 1,059,375.

Method for recovering nucleotide and the salts thereof from fermentation broth. Kyowa Hakko Kogyo Co., Ltd. 1,059,387.

Suphamides and process for preparing them. CIBA, Ltd. 1,059,360.

Safety Razor. Philip Morris Corporation 1,059,398.

Methods of manufacturing mixtures of organic peroxides. Knoll, A.G. 1,059,401-02.

5,7-substituted - 5 - norbornene-2,3-dicarboximides and related compounds. McNeil Laboratories, Inc. 1,059,405.

Process for the manufacture of a pesticide by the chlorination of a sulphur-containing gasoline. Pakistan Council of Scientific and Industrial Research. 1,059,449.

Herbicidal and/or defoliant compositions. H. Schwartz. 1,059,468.

Antacid compositions and their preparation. Armour Pharmaceutical Co. 1,059,495.

Coating tablets. Merck & Co., Inc. 1,059,508.

Aqueous solutions of erythromycin. Abbott Laboratories. 1,059,514.

Production of hydrazine hydrate. Bergwerksverband, G.m.b.H. 1,059,519.

Sanitary wipers for the skin. Kimberly-Clark Corporation. 1,059,541.

Process for the production of sugar syrups. Miles Laboratories, Inc. 1,059,544.

Steroid 2'-acylamino-2'-deoxy-glucosides and-galactosides. Merck & Co., Inc. 1,059,548.

Derivatives of cephalosporin C. Glaxo Laboratories, Ltd. 1,059,562.

Vitamin preparation in beadlet form. F. Hoffman-La Roche & Co., A.G. 1,059,578.

Pyridinium salts. Imperial Chemical Industries, Ltd. 1,059,581.

Steroids. Soc. Farmaceutici Italia. 1,059,603.

Sulphur-containing phenylureas, compositions containing them, and their use as herbicides. Shell Internationale Research Maatschappij, N.V. 1,059,608.

Pregnane 20-guanyl hydrazones and derivatives thereof. Farbenfabriken Bayer, A.G. 1,059,614.

Process for the manufacture of optically active compounds. Westminster Bank, Ltd. 1,059,628.

Fungicides. Progil. 1,059,629.

Process for preparing corticoid compounds. Smith Kline & French Laboratories. 1,059,643.

Process for the production of β -carotene. Rhone-Poulenc, S.A. 1,059,664.

Process for the preparation of L-analine. Tanabe Seiyaku Co., Ltd. 1,059,668.

Unsaturated aldehydes. F. Hoffman-La Roche & Co., A.G. 1,059,674-75.

Process for stabilising biologically active proteinaceous materials. Behringwerke, A.G. 1,059,676.

Personal wear apparatus for use in incontinent and voluntary micturition. F. X. Keane. 1,059,680.

8-hydroxy-bz-tetrahydroquinoline and its preparation. Allied Chemical Corporation. 1,059,701.

BZ-tetrahydroquinoline-N-oxide and its preparation. Allied Chemical Corporation. 1,059,702.

8-acyloxy-BZ-tetrahydroquinolines and their preparation. Allied Chemical Corporation. 1,059,703.

Thiophosphoric esters and pesticidal compositions containing them. Rhone-Poulenc, S.A. 1,059,707.

Apparatus for processing photographic materials. General Aniline & Film Corporation. 1,059,711.

Trimethoxychalcone hydrochloride derivative. William H. Rorer, Inc. 1,059,715.

Shampoos. Unilever, Ltd. 1,059,741-42.

3-imino-2,1-benzisothiazoles. Smith Kline & French Laboratories. 1,059,747.

Production of diacetone-2-keto-1-gulonic acid. Takeda Chemical Industries, Ltd. 1,059,763.

Purine nucleosides and acyl derivatives thereof. T. Sato and Y. Ishido. 1,059,764.

Photographic silver halide emulsions and sensitive materials prepared therefrom. Eastman Kodak Co. 1,059,782.

Production of poly-phosphoric acid. Armour & Co. 1,059,786.

Concentration of phosphoric acids. Armour & Co. 1,059,787.

Processes for the preparation of colchicine compounds, and the compounds thus prepared. Roussel-Uclaf. 1,059,811.

Benzothiadiazole esters of phosphorous acids and their use as pesticides. Shell Internationale Research Maatschappij, N.V. 1,059,799.

Processes for the preparation of intermediates useful in the preparation of colchicine compounds and the intermediates thus prepared. Roussel-Uclaf. 1,059,812-13.

Intermediates useful in the synthesis of colchicine, compounds, processes for their preparation, and the intermediates thus prepared. Roussel-Uclaf. 1,059,814-18.

Process for preparing ketones and ketones so prepared. Soc. des Usines Chimiques Rhone-Poulenc. 1,059,839.

Cyclic nonapeptide. Sandoz Patents, Ltd. 1,059,854.

Apparatus for improving the blood circulation in a part of the body of a human being or an animal. N. A. Macleod. 1,059,858.

Production of micro-organisms. British Petroleum Co., Ltd. 1,059,881-83, 1,059,886-89.

Container for lipstick products. International Silver Co. 1,059,893.

Thiazine derivatives and the preparation thereof. Tanabe Seiyaku Co., Ltd. 1,059,896.

Pill dispensers. Creative Packaging, Inc. 1,059,900.

Naphthalene derivatives. Imperial Chemical Industries, Ltd. 1,059,968.

Substituted pyridines. Imperial Chemical Industries, Ltd. 1,059,990.

6 β , 19-oxido-pregesterones. Olin Mathieson Chemical Corporation. 1,059,992.

Esters of secondary amino-alcohols. U.C.B. (Union Chimique-Chemische Bedrijven), S.A. 1,060,005.

Plaster of paris bandages. Scholl Mfg. Co., Ltd. 1,060,010.

Penicillins. Beecham Group, Ltd. 1,060,034.

Alkylation of phenols. Coal Tar Research Association. 1,060,036.

Blood exchange apparatus. Medizintechnik Leipzig Veb. 1,060,040.

Hydrazine hydrate. Whiffen & Sons, Ltd. 1,060,065.

2,2,2-trichloroethyl hydrogen succinate and salts. Bengel Laboratories, Ltd. 1,060,073.

Phenoxyalkylisothiosemicarbazides. Pfizer, Ltd. 1,060,082.

Recovery of oxytetracycline. Pfizer, Ltd. 1,060,026.

British patent specifications relating to the above will be obtainable (price 4s. 6d. each) from the Patent Office, 23 Southampton Buildings, Chancery Lane, London, W.C.2, from February 22.

From the "Official Journal (Patents)," January 18

Derivative of α -aminobenzyl penicillin. Bristol-Myers Co. 1,060,133.

Bactericidal compositions. Coalite & Chemical Products, Ltd. 1,060,134.

Derivatives of phenylhydroxylamine. Vsesojuzny Nauchno-Issledovatel'skij Institut Khimicheskikh Speditiv Zashchity Rasteniy. 1,060,135.

Thiepin and oxepin derivatives and process for their production. J. R. Geigy, A.G. 1,060,139.

Purifying salt solutions. Dow Chemical Co. 1,060,146.

Process for the production of 3-alkylphenols. Chemische Werke Hüls, A.G. 1,060,156.

4-phenylpiperidine derivatives. Allen & Hanburys, Ltd. 1,060,160.

Photographic cameras. Dangelmaier & Co., Optik und Feinmechanik. 1,060,176.

Method and apparatus for preparing liquid suspensions. Fluid Energy Processing & Equipment Co. 1,060,178.

Fertilizers. Imperial Chemical Industries, Ltd. 1,060,182.

Process for the preparation of a 1H-imidazo [1,5-c] imidazole. Warner-Lambert Pharmaceutical Co. 1,060,194.

Rutin derivatives. Laboratoires Robert et Carriere Des, S.A. 1,060,195.

Method for producing alkaloid derivatives of theophylline-acetic acid. Soc. Agrologique Francaise and G. Koucher. 1,060,245.

Process for the production of choline chloride. U.C.B. "Union Chimique-Chemische Bedrijven." 1,060,256.

Piperazine derivatives. Imperial Chemical Industries, Ltd. 1,060,202.

Pharmaceutical pastilles. Sandoz Products, Ltd. 1,060,258.

Side chain chlorination of alkyl pyridines. Merck & Co., Inc. 1,060,276.

Surgical sponge sticks. H. J. Heimlich. 1,060,288.

Medicinal compositions having anti-tussive action. I.N.I.C.O., Industrial Nuclear Investigation Co., Ltd. 1,060,304.

Derivatives of glycyrrhetic acid and oleanolic acids. Biorex Laboratories, Ltd. 1,060,344.

Process for preparing 3-keto- Δ^{13} -steroids. Smith Kline & French Laboratories. 1,060,354.

Tamperproof closure for dispensing containers. Abbott Laboratories. 1,060,389.

Nonapeptide. Sandoz Patents, Ltd. 1,060,400.

Process for the manufacture of 5'purine nucleotides by a fermentation method. Kyowa Hakko Kogyo Co., Ltd. 1,060,428.

Sensitive photographic silver halide emulsions and materials prepared therefrom. Eastman Kodak Co. 1,060,437.

Antibiotic ussanycin. CIBA, Ltd. 1,060,444.

British patent specifications relating to the above will be obtainable (price 4s. 6d. each) from the Patent Office, 23 Southampton Buildings, Chancery Lane, London, W.C.2, from March 1.

NEW COMPANIES

P.C.=Private Company. R.O.=Registered Office.

B. AND L. SCOVELL, LTD. (P.C.).—Capital £100. To carry on the business of cosmetic manufacturers, etc. Directors: Bronwen Scovell, and Lance R. C. Scovell. R.O.: 70 Eastheath Avenue, Wokingham, Berks.

BARFORTH PHARMACIES, LTD. (P.C.).—Capital £100. Subscribers: Muriel Goldstein and Brian Goldstein, 25 The Glade, Ilford, Essex.

CORAL CANDYS COSMETIC BOUTIQUES LTD. (P.C.).—Capital £100. To deal in cosmetics and perfumery, etc. Directors: M. Taylor and R. Taylor. R.O. 1 Piccadilly, Bradford, 1.

DOCTIBATH, LTD. (P.C.).—Capital £100 To carry on the business of chemists, druggists, etc. Subscribers: Stanley H. Davis and David Ordish, R.O.: 18, George Street, London, W.1.

GREYCOAT DRUG CO. LTD. (P.C.).—Capital £100. To carry on the business of chemists and druggists, etc. Subscribers: S. Hope, Hannah Pinkus. R.O.: 123, Regent Street, W.1.

MARSHALL S. COLLINS (CHEMISTS), LTD. (P.C.).—Capital £100. Directors: Marshall S. Collins, M.P.S., and Naomi J. Collins. R.O.: 14 Green Road (Meanwood Shopping Centre), Leeds, 6.

R. C. N. POWELL (OXTON), LTD. (P.C.).—Capital £6,000. To carry on the business of dispensing chemists, etc. Directors: Robert C. N. Powell, M.P.S., Constance A. Powell, Charles R. Powell, Leslie H. Powell, and Robin F. Powell. R.O.: 53 Christchurch Road, Oxtou, Birkenhead.

R. F. WILLIAMS (CHEMISTS), LTD. (P.C.).—Capital £100. To carry on the business of chemists, druggists, etc. Subscribers: Dorothy M. Graeme, and Paul G. Graeme, 61 Fairview Avenue, Gillingham, Kent.

ROW & TAYLOR (WESTGATE), LTD. (P.C.).—Capital £10,000. To acquire the business of chemists, carried on by Row & Taylor (Norwich), Ltd. Directors: Herbert V. Palmer, M.P.S. and Rose E. Rudd. R.O.: 11 Westgate, Norwich.

SHEFFIELD CLINICAL CONTROLS, LTD. (P.C.).—Capital £100. To carry on the manufacture, sale and distribution of oxygen and other medical gases, etc. Directors: James E. Eardley, Philip M. Booth and John A. Griffiths. R.O.: 63 Stalker Lees Road, Sheffield, 11.

TOOKLES, LTD. (P.C.).—Capital £100,000. To carry on the business of manufacturers of and dealers in all kinds of chemicals and natural fruit and plant extraction, etc. Subscriber: Harold I. Cornish, and Richard A. Mackenzie-Freeman. Solicitors: 56 Portland Place, London, W.1.

PRINT AND PUBLICITY

PUBLICATIONS

Booklets and Leaflets

DEGENHARDT & CO., LTD., Carl Zeiss House, 20 Mortimer Street, London, W.1: Booklet describing how Carl Zeiss polarimeters may be used for accurate determination of concentrations of dissolved substances.

MURPHY CHEMICAL CO., LTD., Wheathampstead, St. Albans, Herts: Murphy Farmers' Booklet 1967 (pp. 36).

WESTBROOK LANOLIN CO. (subsidiary of Woolcombers, Ltd.), Daisy Bank, Duckworth Lane, Bradford, Yorks: Absorption base L1 (information sheet).



DISPLAY UNITS: Left, a unit designed to hold four packs of Bides. Right, a display stand for Polyhairset. Both are obtainable from Richard Hudnut, Ltd., Eastleigh, Hants.

PRESS ADVERTISING

ANDRE PHILIPPE, LTD., 71 Gowan Avenue, London, S.W.6: The advertising programme for André Phillips products during January to March includes *Woman*, *Woman's Own*, *Woman's Realm*, *Petticoat*, *She*, *Honey*, *Vanity Fair*, *True Romances* and *True Story*. The April to June campaign will be aimed at the teenage market and includes *Annabel*, *Valentine*, *Rave*, *Trend*, *Mirabell*, *Romeo*, *Jackey*, *Fabulous*, *New Musical Express* and *Melody Maker*.

J. & J. COLMAN, LTD., Carrow Works, Norwich: Robinson's baby foods. In women's magazines.

DIXON, LTD., St. Leonard's Road, Mortlake, London, S.W.14: Velouté powder cream. In women's magazines.

ENGLISH GRAINS, LTD., Granary House, Burton-on-Trent, Staffs: Yestamin. In national Press, February to September.

P. & M. WARRICK, Seymour Road, London, E.10: Mcgezones. In *Daily Mirror*, *Daily Express*, *Daily Mail*, *Sun* and *Daily Record*, until the end of March.



CHEMISTS AT NEWSPAPER "FIRST TIME": It was made an occasion for celebration when, for the first time, a proprietary medicine was launched by two-colour advertisement in the national Press. Discarding superstitions, Beecham Proprietary Medicines launched Minard's massage in that way in the *Daily Express* on Friday, January 13. Special receptions at the paper's printing centres in London, Manchester and Glasgow on the evening prior to the launch were attended by personnel from the company, its advertising agents and retail chemists. The chemists in the London group shown are Messrs. W. Stragen, Aylesbury (left); J. Crawford and H. E. Wood, Ilford (fourth and fifth from left); and E. G. Smith, London, S.E.19 (right). Also in the group are the company's district sales and area managers.

COMING EVENTS

Items for inclusion under this heading should be sent in time to reach the Editor not later than first post on Wednesday of the week of insertion.

Monday, January 30

UNIVERSITY OF LONDON, Queen Elizabeth College, Campden High Road, London, W.8, at 5.30 p.m. Professor S. J. Pirt on "Cultivation of Microbes and Cells." (Inaugural lecture.)

Tuesday, January 31

IPSWICH AND SUFFOLK BRANCH, PHARMACEUTICAL SOCIETY, Civic College, Rope Walk, Ipswich, at 7.30 p.m. Dr. N. D. Harris (reader in pharmaceuticals, London University) on "Radioactive Isotopes in Pharmacy and Medicine." (Refresher course.)

SCHOOL OF PHARMACY, Liverpool Regional College of Technology, Lecture theatre, Room 506, Liverpool, 3, at 8 p.m. Professor A. D. Macdonald (department of pharmacology, Manchester University) on "Analgesics."

TIES-SIDE BRANCH, PHARMACEUTICAL SOCIETY, Corporation hotel, Middlesbrough, at 8 p.m. Annual dinner.

Wednesday, February 1

BOURNEMOUTH BRANCH, PHARMACEUTICAL SOCIETY, Post-graduate medical centre, Boscombe, at 1.20 p.m. Dr. D. B. Irwin on "Treatment of the Hemiplegic."

CHELSEA PHARMACY ASSOCIATION, Chenil Galleries, 181 King's Road, London, S.W.3, at 7.30 p.m. Annual ball. Tickets (price 15s. double; 8s. 6d. single) from Mr. D. C. Harrod, Chelsea School of Pharmacy, Manresa Road, London, S.W.3.

EDINBURGH AND SOUTH-EASTERN SCOTTISH BRANCH, PHARMACEUTICAL SOCIETY, Charlotte rooms, Edinburgh, at 8 p.m. Annual supper dance.

FEDERATION OF SOUTH-EASTERN PHARMACISTS, Town hall, Lewes, at 7 p.m. Reception by the mayor of Lewes (Alderman H. A. Baker) followed by Mr. L. S. Davey (deputy borough treasurer) on "Lewes — Past and Present."

LANCASTER, MORECAMBE AND WESTMORLAND BRANCH, PHARMACEUTICAL SOCIETY, Elms hotel, Morecambe, at 7.15 p.m. Annual dinner and dance.

MANCHESTER BRANCH, GUILD OF PUBLIC PHARMACISTS, Clinical lecture theatre, Royal Infirmary, Manchester, at 7.30 p.m. Mr. S. S. Baxter on "Tests and Marking — Assessments."

PHARMACEUTICAL GROUP, ROYAL SOCIETY OF HEALTH, 90 Buckingham Palace Road, London, S.W.1, at 7.30 p.m. Mr. K. Mc-

Donald (Johnsons of Hendon, Ltd.) on "New Developments in Photography."

SUNDERLAND PHARMACEUTICAL STUDENTS' ASSOCIATION, Roker hotel, Sunderland, at 7.15 p.m. Annual reunion dinner and dance.

Thursday, February 2

BOURNEMOUTH BRANCH, NATIONAL PHARMACEUTICAL UNION, Post-graduate medical centre, Boscombe, at 7.30 p.m. Mr. K. E. Long (N.P.U. shopfitting department) on "Modernisation in Mind?"

COVENTRY AND WARWICKSHIRE BRANCH, PHARMACEUTICAL SOCIETY, Coventry Technical College, Butts Coventry, at 7.30 p.m. Dr. B. J. Northover (principal lecturer in pharmacology, Leicester Regional College of Technology) on "Diuretic Therapy." (Lecture course.)

NORTHUMBRIAN BRANCH, PHARMACEUTICAL SOCIETY, Conservative club, Pilgrim Street, Newcastle upon Tyne, at 7.45 p.m. Film evening and formulation of Branch resolutions.

SOCIETY OF COSMETIC CHEMISTS, Royal Society of Arts, John Adam Street, London, W.C.2, at 7.30 p.m. Mr. W. Harding (Croda, Ltd.) on "Cosmetic Raw Materials '67."

SOUTH-EAST METROPOLITAN BRANCH, PHARMACEUTICAL SOCIETY, Yorkshire Grey hotel, London, S.E.9, at 6.45 p.m. Annual dinner and dance.

Friday, February 3

EXETER BRANCH, PHARMACEUTICAL SOCIETY, Rougemont hotel, Exeter, at 7.45 p.m. Formulation of Branch resolutions.

MENBOROUGH BRANCH, NATIONAL PHARMACEUTICAL UNION, New Mason's Arms hotel, Menborough, at 7.30 p.m. Annual meeting.

SHEFFIELD BRANCH, PHARMACEUTICAL SOCIETY, Health education centre, Nursery Street, Sheffield, 3, at 8 p.m. Films: "Narcotics . . . The Decision;" "Profile of a Problem Drinker."

Courses and Conferences

INSTITUTE OF PACKAGING, National College of Food Technology, Weybridge, Surrey, April 2-14. Residential course on packaging technology (includes lecture on packaging of pharmaceuticals and cosmetics). Fee: members, etc.: £65; non-members £70. Details from the Institute, Malcolm House, Empire Way, Wembley, Middlesex.

RETAIL TRADES EDUCATION COUNCIL, Matthew Boulton Technical College, Brasshouse Passage, Broad Street, Birmingham, 1, on March 16. "Managers as Trainers" (Course to help managers and proprietors of small retail businesses prepare to meet the demands of a training board for distribution.) Details from Training Development Officer, Retail Trades Education Council, 56 Russell Square, London, W.C.1.

SOCIETY FOR ANALYTICAL CHEMISTRY, University of Nottingham, July 1968. Conference. Details from Mr. A. S. Beidas, Standards Department, Boots Pure Drug Co., Ltd., Nottingham.

Advance Information

WEST SUSSEX PHARMACEUTICAL COMMITTEE, Assembly hall, Stoke Abbott Road, Worthing, at 8 p.m. on March 8. Speaker: The Minister of Health (Mr. K. Robinson).

WILLS

MR. G. T. PURDY, M.P.S., 69 Crewe Road, Alsager, Ches., left £1,938 (£1,875 net).

MR. D. B. TORRANCE, M.P.S., 32 Bramshall Road, Uttoxeter, Staffs, left £10,793 (£10,675 net).

MR. K. C. H. WESTCOTT, M.P.S., 6 Greenway Gardens, Chippenham, Wilts, left £9,510 (£9,436 net).

MR. G. WILL, M.P.S., 6 Hylands Parade, Wood Street, Chelmsford, Essex, left £10,478 (£10,258 net).

Prescribers' Press

What doctors are reading about developments in drugs and treatments

ZINC sulphate, administered as 220 mgm. capsules three times a day, has been found by workers at Rochester University, New York, U.S.A., to accelerate the healing of granulating wounds in humans. The effort had been noted in rats in 1953 by one of the present authors, but its application to clinical practice was difficult until the discovery of a wound upon which measurements of healing could be made accurately. In the trial the wound formed by excising pilonidal-sinus tracts was used. Comparison of ten treated patients with ten untreated controls showed that wounds healed in an average of 45.8 (± 2.6) in the former group and 80.1 (± 13.7) in the controls. Healing rate (as measured by reduction in wound volume each day) was nearly three times as great in the treated group as in the control group. The results, say the authors, are biased to some degree, because the volunteers were required to give informed consent to the trial owing to the lack of knowledge in zinc therapy in man. However, the dose was apparently safe for periods up to sixty-one days. The capsules were taken with milk or after a meal to minimise gastro-intestinal irritation. Discussing the possible mode of action, the authors say that zinc probably acts primarily at the wound site, where it may be incorporated into enzyme systems (they have shown previously that radioactive zinc is preferentially concentrated in healing tissues with a peak of activity during the first days after injury). Zinc is also known to

be the metal moiety in a number of essential enzyme systems. They maintain that a greater understanding of the biochemical processes in healing is required before specific rôles can be assigned to zinc, though it can be only one of many factors contributing to the repair process. (*Lancet*, January 21, p.121.)

FURTHER evidence of the effects of aspirin on the stomach has been obtained by workers at St. Thomas's Hospital, London, and the Postgraduate Medical School of London. In the first part of their study, five of ten patients about to undergo partial gastrectomy were given 3.4gm. of soluble aspirin daily in divided doses for 2.5 days before the operation. The surgical specimens revealed erosions of the gastric mucosa in all patients given aspirin, but only a patient with a carcinoma showed signs of erosion among the controls. It was noted also that the mucosa stripped easily in the aspirin patients but was much tougher in those who had not received aspirin. The finding is said to agree with the reports that soluble aspirin causes as much occult bleeding as tablets of aspirin, B.P. The susceptibility to occult bleeding caused by aspirin was then studied in 226 subjects who had no known gastrointestinal tract lesion. Taking a blood loss of more than 2 mls per day of treatment as significant, 78 per cent of the group showed a positive response. Repeat tests showed the response to be consistent in individuals, suggesting that the susceptibility was determined by factors specific to the individual. Quantitative examination of cellular exfoliation after aspirin showed that in most patients who were insensitive to aspirin there were cytological abnormalities characteristic of atrophic gastritis. The rate of loss of gastric epithelial cells was increased by aspirin in the subjects who bled after the drug, and

it is suggested that a haemorrhagic lesion may result when the rate of loss of surface cells exceeds the rate at which they can be replaced. In some patients with atrophic gastritis (who appeared to be protected to some degree) a high turnover of gastric epithelial cells may therefore have prevented the formation of erosions. (*B.M.J.*, January 21, p.137.)

A NEW oral diuretic (MK-870) with potassium-sparing properties has been evaluated by workers at Auckland Hospital, New Zealand, in eleven patients with resistant oedema. The compound is N - amidino - 3,5 - diamino - 6 - chloropyrazinamide hydrochloride dihydrate. It was found to potentiate the sodium and water diuresis induced by hydrochlorothiazide or ethacrynic acid while completely reversing their kaliuretic effect. In this short-term trial increases in serum potassium were not significant and no serious toxic effects were encountered. (*B.M.J.*, January 21, p. 143.)

CONTEMPORARY THEMES

ZINC SULPHATE. Acceleration of wound healing in man with zinc sulphate given by mouth. *Lancet*, January 21, p. 121.

TREATMENT of urinary schistosomiasis. *Lancet*, January 21, p. 130.

METHYLDOPA AND METHOSERPIDINE in hypertension. *Lancet*, January 21, p. 141.

ASPIRIN. Gastric mucosa and susceptibility to occult gastrointestinal bleeding caused by aspirin. *Brit. med. J.*, January 21, p. 137.

PROPRANOLOL (INDERAL). Haemodynamic effects of, in acute myocardial infarction. *Brit. med. J.*, January 21, p. 143.

MK-870: a new potassium-sparing diuretic. Evaluation of. *Brit. med. J.*, January 21, p. 143.

LYNDIOL, an oral contraceptive. Effect of, on breast cancer. *Brit. med. J.*, January 21, p. 150.

TWO DIURETIC DRUGS [Dichlotride, Hygroton] Effect of, on liquid consumption and free choice of alcohol in albino rats. *Nature*, January 21, p. 316.

COMMERCIAL TELEVISION

The information given in the table is of number of appearances and total screen time in seconds. Thus 7/105 means that the advertiser's announcement will, during the week covered, be screened seven times and for a total of 105 seconds.

Period—February 5-11

PRODUCT	London	Midland	North	Scotland	Wales & West	South	North-east	Anglia	Ulster	Westward	Border	Grampian	Eirann	Channel Is.
Alka-Seltzer ...	3/90	3/90	3/90	3/90	3/90	3/90	3/90	3/90	3/90	3/90	3/90	3/90	3/90	3/90
Anadin ...	3/90	5/81	2/60	1/30	2/60	2/60	2/60	2/60	2/60	2/60	2/60	2/60	—	2/60
Andrew's liver salt ...	—	—	—	—	—	—	—	—	—	—	—	—	2/30	—
Askit powders and tablets	—	—	—	7/49	—	—	—	—	—	—	3/21	2/14	—	—
Bisodol ...	—	2/14	—	—	3/21	—	—	5/35	—	—	—	—	—	—
Buttercup syrup ...	—	2/30	3/60	—	—	—	—	—	—	—	1/15	—	—	—
Coldrex ...	—	—	—	—	—	—	—	—	—	—	—	—	2/30	—
Cow & Gate milk foods ...	1/30	—	—	1/30	1/30	—	1/30	—	1/30	—	—	—	—	2/60
Delrosa ...	—	—	—	—	—	—	—	—	—	—	—	—	1/15	—
Disprin ...	1/15	2/45	1/15	3/45	1/15	2/45	2/45	2/45	1/15	2/45	2/45	2/45	—	1/30
Fennings gripe mixture	—	—	2/14	—	—	—	—	—	—	—	—	—	—	—
junior aspirin ...	—	—	1/7	—	—	—	—	—	—	—	—	—	—	—
Glymiel Protective hand cream	3/45	1/15	1/15	—	1/15	1/15	1/15	1/15	—	—	—	—	—	—
Horlicks ...	3/90	4/120	6/180	3/120	4/120	2/60	4/120	6/240	3/90	2/60	3/90	3/120	4/51	4/120
Kleenex Silk-Soft ...	5/150	5/150	5/150	4/120	4/120	5/150	4/120	4/120	4/120	4/120	4/120	4/120	—	4/120
Milk of Magnesia ...	—	—	—	—	—	—	—	—	—	—	—	—	2/30	—
Milpar ...	—	—	—	—	3/90	—	—	—	—	—	—	—	—	—
Nulon ...	3/90	1/30	1/30	2/60	1/30	1/30	—	1/30	1/30	2/60	2/60	2/60	—	1/30
Rinstead pastilles ...	3/45	2/30	3/45	2/30	3/45	3/45	3/45	3/45	2/30	2/30	3/45	2/30	—	—
Score ...	3/90	3/90	3/90	3/90	4/120	4/120	4/120	4/120	3/90	3/90	4/120	3/90	—	4/120
Steradent ...	1/30	1/30	—	1/30	—	1/30	—	2/60	2/60	1/30	2/60	2/60	—	1/30
T.C.P. ...	2/60	3/90	2/60	1/30	1/30	1/30	2/60	4/120	2/60	2/60	2/60	4/120	—	—
White Cross cough mixture ...	—	—	4/60	—	—	—	—	—	—	—	—	—	—	—
Wrights Coal Tar Soap ...	1/15	1/15	1/15	—	1/15	1/15	1/15	1/15	—	1/15	1/15	—	—	—